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FEATURES IN THIS ISSUE

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MUTINY IN THE "AMISTAD" . . . . . *By Margaret Wallace*
ICE BOATS . . . . . *By Ray Ruge*

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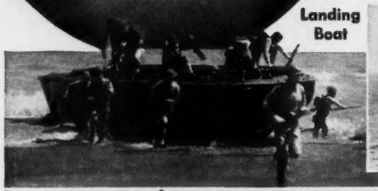
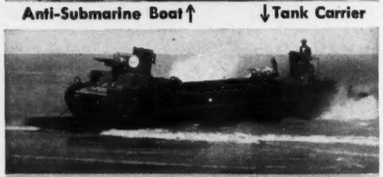


Landing Boat

Anti-Submarine Boat↑ ↓Tank Carrier



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Sincerely yours,
FRANK KNOX (Signed)

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Armored Support Boat

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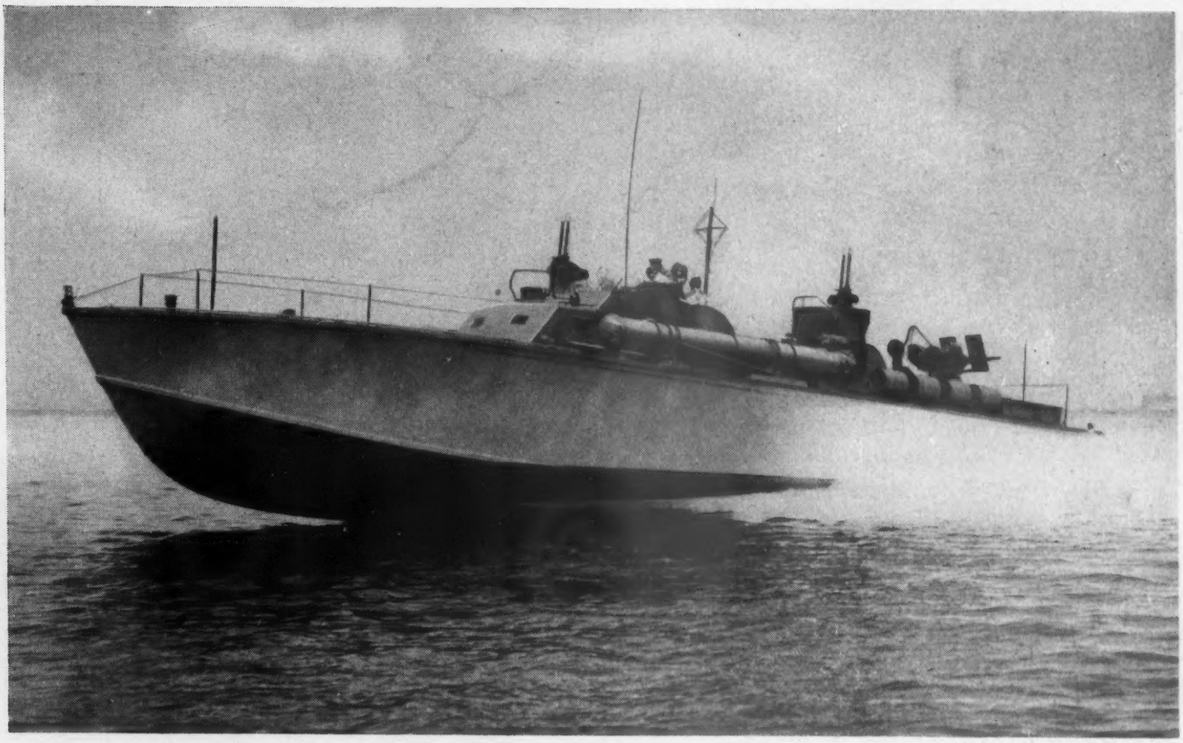

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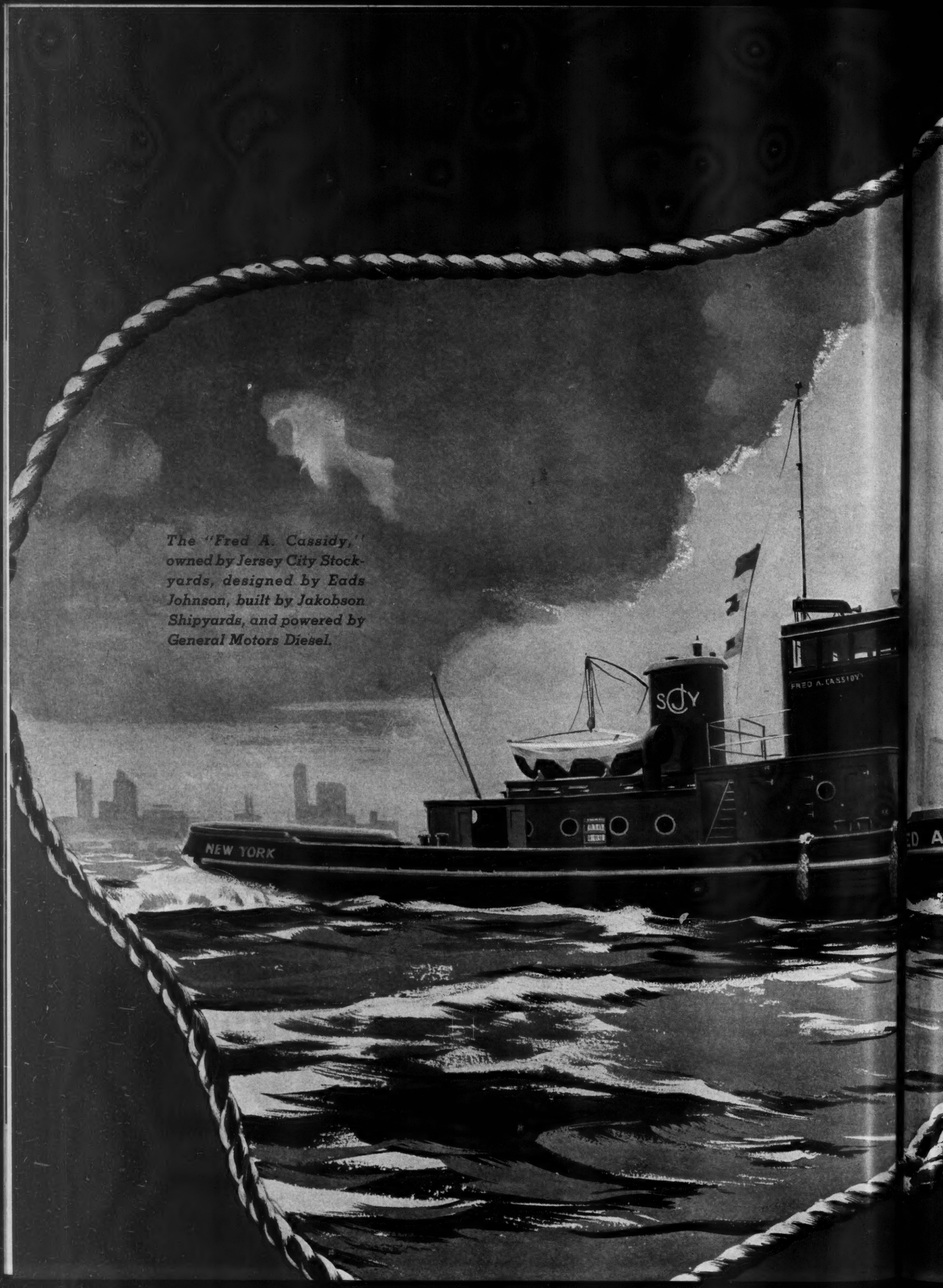

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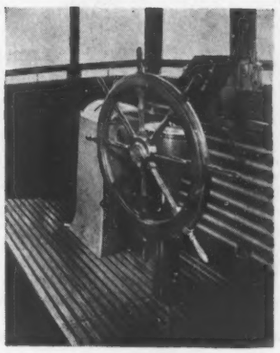

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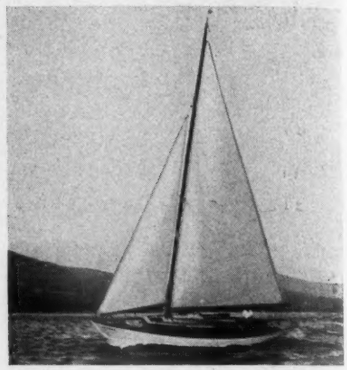

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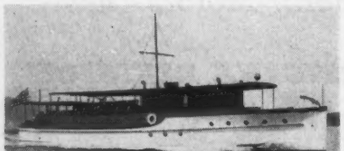

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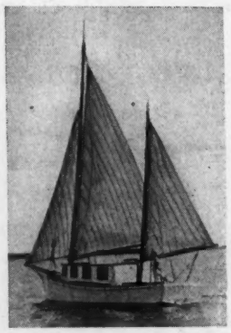

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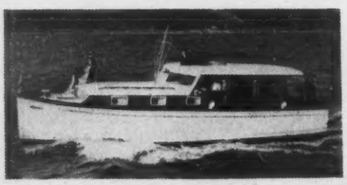

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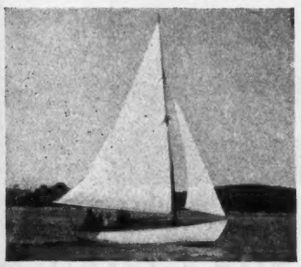

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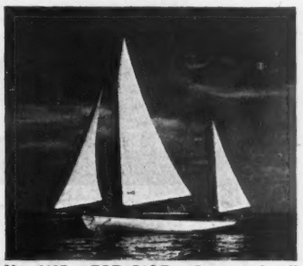

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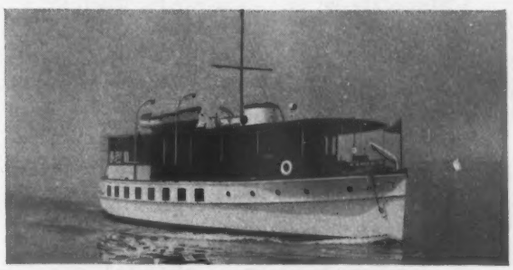

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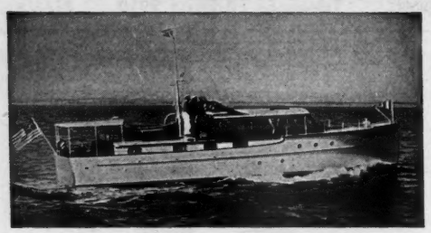

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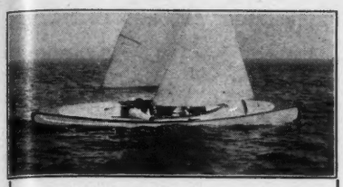

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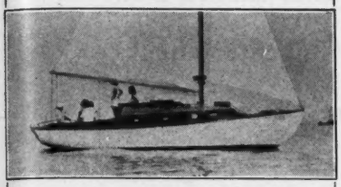

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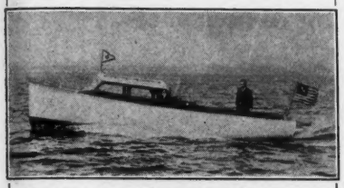

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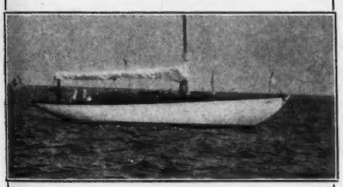

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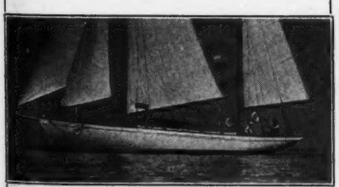

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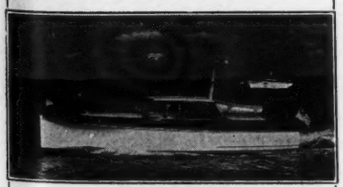

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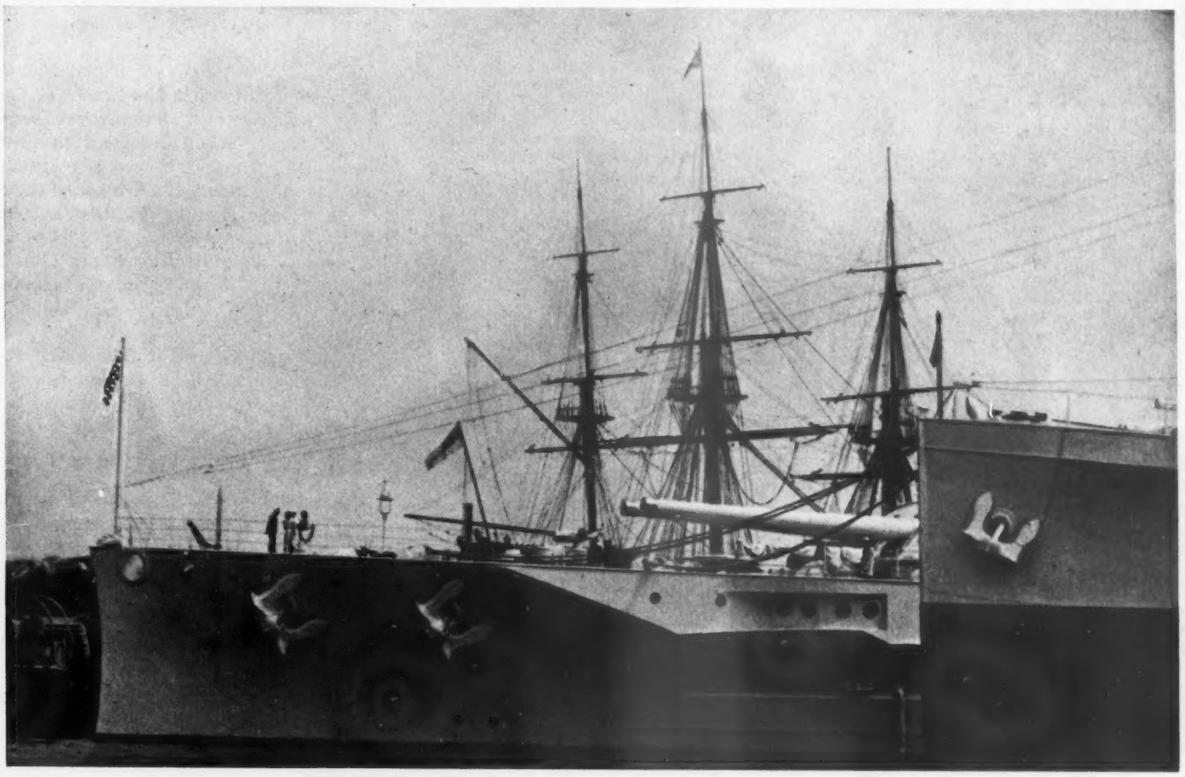
1942



"Sisters under their skins." A United States battleship and an auxiliary vessel in Portsmouth, England, with the spars of Nelson's flagship "Victory" in the background

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YACHT CLUB NEWS AND COMMENT

COLLEGE DINGHY SAILORS OPEN BUSY SEASON

▶ The executive committee of the Intercollegiate Y.R.A. has announced a schedule of twenty-one dinghy regattas for the fall season. The first was sailed on October 3rd and the last is scheduled for November 22nd. A variety of events is included, from dual matches to large regattas which may include as many as twenty colleges. Several regattas promise keen racing, with some of the top flight yachting teams in competition.

The chief event of the fall season is set for November 1st, when the Nautical Association of M.I.T. holds the second annual open intercollegiate regatta for the Erwin H. Schell Trophy. This contest, to be sailed on the Charles River Basin, was won last season by Dartmouth. All twenty regular member clubs of the I.C.Y.R.A. are eligible to enter this meet and, in addition, winners and runners up in the Associate Member Championships are invited to compete.

Two new fall events are scheduled this year. One is the first attempt under I.C.Y.R.A. sanction to sail a regatta limited to freshman crews during a fall racing season. M.I.T. offers the first year men competition in a non-championship regatta on November 8th. It will be sailed on the Charles River Basin. The other new event is a series of team races, three or four teams competing, in which the morning winners meet in the afternoon, the second place teams also competing later. M.I.T. will loan facilities and the Northeastern Y.C. will sponsor the meet, scheduled for November 15th.

Among the traditional events was the tenth annual regatta between Brown, Dartmouth, Harvard and M.I.T. for the Jack Wood Trophy, sailed on October 18th, and Brown's annual invitational regatta, sailed on the Seekonk on October 31st. In all, there were fourteen regattas sailed in the month of October by member clubs of the Intercollegiate Yacht Racing Association.

LIGHTNING CLASS WARTIME REGATTA

▶ David G. Cluett, 16-year-old skipper from the Cedarhurst Y.C., Lawrence, Long Island, runner up in the 1941 championship, won the 1942 Special Wartime Regatta of the Lightning Class at South Haven, Mich., on September 12th and 13th. He did it, too, in a borrowed boat and against the stiffest competition. Second went to Walt Swindeman, Jr., of the I.L.Y.A. of Toledo, O. Swindeman, who had had no racing experience previous to this season, gave Cluett a battle all the way. Third place laurels were won by Karl Smither of the Buffalo Canoe Club. Only one point separated the first three boats.

The regatta, known as the "National Championships Special Wartime Regatta," took the place of the regular championship series originally scheduled for the Buffalo Canoe Club. That series was cancelled early in August, due to gasoline rationing and wartime restrictions on transportation. The South Haven Y.C., a hotbed of Lightning activity for the past two years and well outside the rationing zone, offered its facilities and put on a well-conducted and thrilling regatta. The South Haven Club, under the capable leadership of Commodore Russell Overton, an enthusiastic Lightning sailor, is only three years old.

Regatta Chairman Leonard Ladenburger's energetic campaign for entries netted 18 starters representing 15 fleets. He had to find a number of qualified local boats for visiting skippers. His fellow clubman, George Joslyn, who confounded officials of the 1941 Nationals at Skaneateles by purchasing a new boat and requesting permission to enter her just before the first race started, had charge of the annual meeting.

On the first day, the open waters of Lake Michigan churned under a strong southwest wind, gave the starters of the first race plenty to think about. Three skippers turned back before reaching the starting line, after a brief set-to with the 35-mile wind. Three more boats did not finish, but twelve hardy skippers and their crews proved once more how seaworthy a 19-foot Lightning can be.

In view of the weather conditions, the race committee made it a once-around race, leaving Karl Smither, of Buffalo, in first place, followed by Walt Swindeman, Jr., and Bill Girkins, Toledo. Cluett qualified for the seamanship medal. Turning the first mark well in the lead, Cluett saw his main shroud jump out of the spreader. He sent one of his crew forward to hold it out to windward to support the mast and finished without further mishap.

The second race was sailed by all eighteen entries under clear skies and in a moderate southwest breeze. It was the closest race of the series, with Cluett nosing out Swindeman in a photo finish, while Karl Smither, of Buffalo, placed third.

The third race was held under equally ideal conditions, although the wind had freshened and shifted more to the west. In this race, Cluett was never headed and had a wide lead at the finish mark. In spite of Cluett's demonstration of skill it remained for Ted Siferd of Lima, O., in *Jean S.*, to settle the championship. He made a strong finish on the last lap, nosing out Swindeman for second. A second for Swindeman would have given him the trophy. Though his third place score tied the champion in total points, he was declared the runner up under the class rule which breaks a point tie in favor of the skipper with two firsts.

A special trophy, donated by Henry Williams of South Haven, was awarded to Cluett for the best showing made by a visiting skipper in a borrowed local boat. This was in addition to the silver bowl replica of the National Perpetual Trophy and the championship flag which the Long Island youth takes back to his home club. The champion also has custody of the big Perpetual Trophy, until the next national regatta. Second and third place winners received flags.

CALENDAR

November 1 — Second Annual Open Regatta, Erwin H. Schell Trophy, Nautical Association of M.I.T., Charles River Basin
November 8 — Women's *vs.* Men's Colleges Regatta. Radcliffe, Pembroke, Jackson, Connecticut, Wheaton, Harvard, Brown, Tufts, Holy Cross, Rhode Island State, Brown University Y.C., Seekonk River
November 8 — Invitation Freshman Regatta, open to regular, provisional and associate member clubs of the I.C.Y.R.A. Nautical Association of M.I.T., Charles River Basin
November 14 — Dual regatta, Yale *vs.* Princeton, Princeton Y.C., Lake Carnegie
November 15 — Invitation Team Race Regatta, Northeastern University Y.C., Charles River Basin
November 22 — Dual Regatta, Harvard *vs.* Yale, Yale Corinthian Y.C. Location undecided

F. K. GUNDLACH

▶ Lieutenant Commander Francis K. Gundlach, U.S.N.R., died at the Naval Hospital, Brooklyn, N. Y., on October 12th after an illness of five months. He was 47 years of age. He was in command of a division of the New York Naval Militia and had been naval aide to three governors of New York State. During World War I, Commander Gundlach received the Navy Cross for remaining aboard a torpedoed ship and helping to beach her.

He was prominent in the U. S. Power Squadrons and had been secretary of that organization for some time previous to his death. He is survived by his wife and a son.

FAST TIME AT GROSSE POINTE Y.C.

▶ With a 25- to 30-mile-an-hour northwest wind abaft the beam, Fred Temple's Eight-Metre *Warrior*, spinnaker set and drawing, crossed the finish line at the Grosse Pointe Y.C. only 3 hours 23 minutes 15 seconds after starting the 24-mile "hour glass" course. The event, the third annual Blue-Nose Race, was started at 10:30 a.m. for the Universal, Racing-Cruising, and Cruising divisions.

Temple's *Warrior* has succeeded in placing in every race since her arrival on Lake St. Clair, and has won the majority. Though the "Eights" were the scratch class in the Universal Division, *Warrior* won hands down.

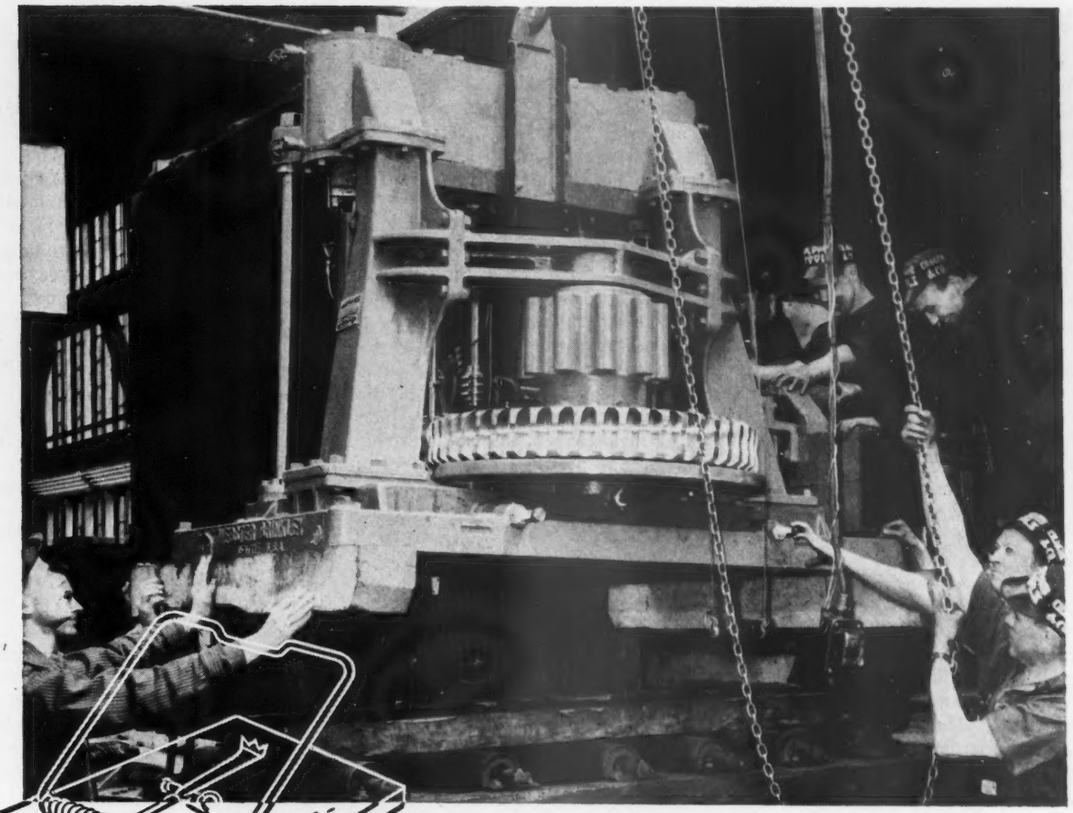
Not only was this the perfect weather for *Warrior*, but "Tootie" Gmeiner's *Apache* maintained her record by winning the Racing-Cruising Division. "Tootie" has spent most of his time this summer skippering races under the handicap of a game leg, but has certainly kept up the reputation of his trim N.Y.Y.C. "32" as one of the fastest Racing-Cruising boats on Lake St. Clair. The other competitors in this class were Commodore George Naumann, of the Detroit Y.C., whose *Estrellita* placed second, followed by Gari Stroh's *Gurkha*. *Minx*, Eddie Wunsch's craft, lost her main on the first leg, a reach, and was unable to continue.

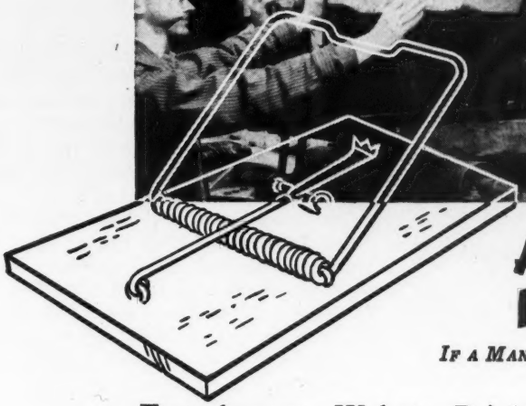
The Cruising Division winner was Tommie Lott's *Duchess*, which beat Andy Langhammer's *Rambler* on corrected time. Among the other Universal Division placers were *La Salle*, an "R" boat, which finished second, followed by the Six-Metre *Challenge*. Two "Sixes," *Totem* and *Question*, both of Toledo, and Perce Darnell's Eight-Metre *Pintail*, did not finish.

SALLIE TIMMENS

NEW OFFICERS AT STAMFORD

▶ At the annual meeting of the Stamford Y.C., held at the clubhouse on October 13th, the following flag officers were elected to serve through the ensuing year: Commodore, Charles A. Betts, Jr.; vice commodore, Nathaniel S. Seely; rear commodore, Alphonsus J. Donahue. Directors, to serve for three years, are: John C. Zimmerman, Jr., Mortimer L. Doolittle, Dr. Francis C. McMahon, Thomas P. Milligan, Wilfrid M. Thomson.





A STEERING ENGINE IS NO "MOUSE TRAP"

If a Man Builds a Better Mouse Trap . . . The World Will Beat a Path to His Door—Emerson

Just because Webster-Brinkley has broken all production records in building steering engines for Liberty Ships, we don't expect "the world to beat a path to our door" . . . BUT there are reasons why this performance has been possible.

First—a burning desire to win this war.

Second—a hard-hitting organization of designing and expediting engineers.

Third—application of assembly line methods for the first time to this type of production.

Fourth—special equipment that short-cuts months off scheduled delivery time.

Fifth—a location convenient to the great Pacific Northwest shipyards where climatic conditions permit year-round work in comfort.

Sixth—the fine co-operation of suppliers of material and parts who have geared up their own plants to wartime production.

This old, established company has been manufacturing heavy machinery for many years. Today we are concentrating our facilities on the design and manufacture of steam, electric and electro-hydraulic steering gears, electric driven capstans and anchor windlasses.

There will be other jobs we can think through just as fast and do just as quickly. Perhaps it's one that neither you nor we can tackle during the war—except to do the thinking. Or it may be one we can put our teeth into today . . . if it will help win the war.

We find new ways to do old jobs and originate ways to do new jobs.

Merit award of U. S. Maritime Commission

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IN THE WIND

▶ "Blue water and salt water will get into the veins of a whole new generation that heretofore has not known the thrills of boating," predicts a contemporary. "And once again we shall all be going *down to the sea in ships* . . ."

I joyfully agree — but I had heretofore been laboring under the impression that *blue* water in the sense that sailors use the term was always *salt* water . . .

▶ John Rochett inquires: "Could you give me some line on the correct procedure when visiting an anchorage kept by a yacht club in which you know no members?"

I leave the answer to this one up to some of my readers who may be more familiar with the technique of crashing the gate than I am. . . . Offhand, I'd say that, unless you were in a jam, you wouldn't ask for the use of the facilities of a club of which you weren't a member unless there were a reciprocal agreement between it and a club in which you held a membership. . . . On the other hand, as Major George Fielding Eliot invariably puts it, most yacht clubs in normal times are cordially hospitable to cruisers no matter who they are or what their affiliations. . . .

WANT MOTOR-SAILER
that will sail, about 45 feet . . .
etc., etc. . . .

Apropos of this item, Ralph Wiley claims: "We built a couple that would sail as much as a hundred yards and back again. . . ."

▶ Ships, bless 'em, are being subjected to all sorts of indignities these days, no one having any regard for their sensitivity. . . . Few small craft are any longer honored by a slide down the ways in traditional fashion with a snootful of champagne as a baptism; instead, they're in many instances being rudely pushed overboard sidewise without the slightest formality and the lurch they take when waterborne gives them a drunken and irresponsible appearance that belies their sterling worth. . . . Now a so-called *secret ship*, product of Mr. Kaiser's genius, has been — of all things — launched from a *giant sled* on which she was assembled. . . . Her cradle was "towed to the water's edge for the launching, thereby saving lumber and time needed to build ways. . . ."

▶ Caleb Bilgewasser, whose rank may not be revealed until after the war due to the fact that he is engaged in operations of a highly *hush-hush* nature, informed me in strictest confidence the other day of a new dodge which our Navy is about to employ in its campaign against the Teuton sea raiders. . . . *Paint-spreaders* (officially the *PDQ boats*) will throw a spray of green paint on the sea surface directly above an enemy sub as soon as she has been located by listening devices. . . . When the undersea craft rises, her periscope becomes fouled by the paint so that her commander believes she is still submerged; hence he keeps on rising. . . . When his craft has attained a height of about 400 feet in the air, she is an easy target for anti-aircraft guns. . . .

This peachy idea comes from an unimpeachable source and should not be bruited abroad lest it give aid and comfort to the enemy. . . .

▶ "The fishing boat, her motor disabled, had been drifting all Sunday afternoon and night. The eight passengers and Capt. Dan Collins and his mate were chilled and miserable, and the passengers were not so enthusiastic about tuna fishing as before, but otherwise everyone was all right. . . ."

Which seems to this compartment like another one of those masterpieces of understatement. . . .

▶ From the "New York Evening Post," September 25th, 1842:

"SPIRIT RATIONS IN THE NAVY. — Orders have been received at this station for the reduction of the spirit rations *one half*, and substitution of tea, coffee, sugar &c., instead of it.

"It strikes us that the largest liberty in the premises would be to pay every sailor the money and let him buy Rum, Tea, Coffee or Sugar. We have no faith in that sort of temperance which merely substitutes a gill of rum a day for a half pint as a *regular* dose. . . ."

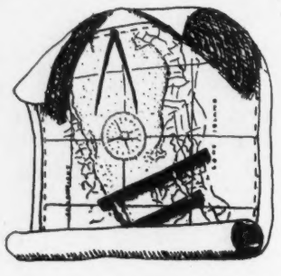
Which brings to mind that when the spirit ration was finally abolished (circa 1863), a poet in the service wrote some verses which included the couplet:

"They've raised Jack's pay five cents a day
And stopped his grog forever."

▶ In the publisher's blurb for "Admiral Sims and the American Navy," it is stated that the famed officer "went to sea in 1880 in a *5000-ton* wooden ship. . . ."

Which sounds pretty luxurious for those days, it seems to me. . . .

▶ While Sterling Hayden commands his trading schooner in the Caribbean, transporting war material etc., his charming bride, Madeleine Carroll, who honeymooned with him aboard ship, is also pitching into the war effort in a big way. . . . Recently Miss Carroll (or, rather, Mrs. Hayden) announced she had joined the staff of the United Seamen's Service as director of entertainment for clubs and rest homes that the organization is establishing throughout the world for officers and men of the American Merchant Marine. . . .



Said she: "This is the most exciting role I have ever undertaken."

▶ A lot of guns that spoke in the War of 1812, the Civil War and the Spanish-American War, have until recently been window dressing at the New York Navy Yard in Brooklyn but are now, except in the case of a few masterpieces, being contributed to the frantic scrap drive. . . . Of the eight smooth bores captured on October 25th, 1812, from H.M.S. *Macedonian*, commanded by Captain Carden, R.N., by the U.S.S. *United States*, commanded by Commodore Stephen Decatur, U.S.N., six went to the scrap heap and two were preserved. . . .

Also to be spared is an "early unsuccessful experimental submarine" — the *Intelligent Whale* — which was built in 1864 by C. S. Bushnell, Augustus Rice and a partner named Halstead, of New Jersey, at a cost of $60,000. . . . She was given a trial and condemned in 1872. . . .

The first ironclad sub, incidentally, lies on the beach at Bayou St. John, New Orleans, where she was built in 1862 as a privateer designed to raid for the Confederacy. . . . She was known as the C.S.S. *Pioneer:* tonnage, 4; length, 34 feet; beam, 4 feet; draft, 4 feet . . . and was a flop. . . .

The Stockton gun, a choice relic at the Navy Yard, was built in England and was among the first pieces of ordnance to fire explosive shells. . . . Its mate, called the *Peacemaker*, burst aboard the U.S.S. *Princeton* February 28th, 1842, killing . . . several congressmen and two Cabinet members. . . .

Hmmm. . . .

▶ What with Madeleine Carroll, as previously mentioned, j'ining up with the Maritime Service and Cap'n Thomas Blau, U.S.N.R., being named commander of the outfit, things are looking up for our merchant mariners like crazy. . . . The mild-mannered, two-fisted skipper, who is under sixty, has been at sea since he was nine when he shipped out of New York in a clipper bound for Hong Kong. . . . An A.B. at thirteen, he made a voyage around Cape Stiff that lasted 136 days. . . . He has the Navy Cross for distinguished service in the last war in the salvage of the American freighter *Westward-Ho*, torpedoed off France. . . .

▶ The World Series, as usual, stole the spotlight from the World War last month. . . .

▶ From his wheel chair on the bridge of his mine sweeper, aged but intrepid "Spun Yarn" reports that he sighted "a famous ex-ocean racing schooner on patrol duty . . . jogging along snugged down to nothing but her foresail. . . . There she is," he ruminated . . . "and there she stays until her orders run out . . . and that isn't the way I've done my cruising or intend to do it when the war is over. . . ."

The crotchety old irreconcilable curmudgeon!

TELLTALE

You've already hollered "ouch!" when the Elco PT's hit you, Mr. Jap Admiral. But you've had only a tiny taste of what we've got in store for you and your cowardly Navy.

More and more Elco PT's are sliding off the ways, and headin' your direction in a hurry. Of course you know now that these diminutive, indomitable water-wasps have sting and speed and getaway power . . . that they attack noiselessly . . . that they can sink your biggest cruisers and rake your fastest dive bombers with deadly lead . . . that they are manned by fightin men who don't know the word "fear" and who can squeeze the last ounce of viciousness out of their beloved PT's.

Elco has still bigger surprises for you. No, not even the wiliest of your spies know what they are. And we're not going to warn you — until you feel them right in your teeth . . .

Watch out, Tojo! Our PT's are coming right at ya!

ELCO NAVAL DIVISION OF THE ELECTRIC BOAT COMPANY

BAYONNE, N. J.

MOTOR TORPEDO BOATS • SUBMARINE CHASERS • NAVAL AUXILIARIES

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WHAT OUR READERS SAY

ANOTHER GOOD SAILORMAN

Editor, YACHTING:

▶ The letter about Teddy Parker, who was one of the best of the sailormen developed in *Ilex*, of the Royal Engineers' Yacht Club, which you published in your August issue, has been read with great pleasure by his many yachting friends in this country and, I have no doubt, by the many American members of the Royal Ocean Racing Club who know him.

It was Teddy Parker that the late Dennis Hunt, *Ilex's* skipper, jumped overboard to rescue in a North Sea gale — an episode for which Hunt was awarded the Royal Humane Society's medal for life saving.

You might be interested in a somewhat similar letter about Dennis Hunt's brother, Major E. W. F. de V. Hunt. He did not sail in *Ilex* as he was a gunner and she is the Royal Engineers' yacht, but he was often one of the crew of *Spica*, owned by his father and mother, which has several times won the Channel and half-a-dozen other ocean races. He is the famous international rugger player, "Bunch" Hunt; also an outstanding polo player and quite up to the standard of a most noteworthy all-star family.

I enclose a copy of a letter, written by a brother officer who was at Hong Kong, to Bunch Hunt's mother:

▶ "You may remember me as I was for a time in Ted's battery at Stanley. I have had the good fortune to make good my escape from the Prisoner of War Camp in Hong Kong. It was nothing like as difficult a trip as I had imagined.

"I much regret that I can give you no good news of Ted. He is missing and I believe killed. I thought that Ted put up a magnificent show. He fought a damned good battle all down the Devil's Peak Peninsula, doing tremendous execution amongst the Japs. Though they lost all their mules during the evacuation of Devil's Peak, he somehow got all his guns back into the island and into their proper positions. When the Japs landed and overran our positions in the eastern half of the island, he turned his gunners into infantry. When the Japanese captured Wong Nei Chong gap, he led a counter attack and, almost single-handed, recaptured the place. He then came down to Battle H.Q. where I saw him. (I had been made Brigade Major R.A. about three weeks before the fighting started.) At that time he was very pleased with himself indeed. He looked a dreadful tramp, he hadn't shaved for several days, he was wearing a weird selection of clothes and had got a tommy gun slung over his shoulder. He said to me 'John, you know this is the most wonderful weapon that was ever invented. I have been absolutely massacring the Japs with it.'

"As he appeared not to have had any sleep for 48 hours, the C.R.A. ordered him to go back to Stanley and rest. About that time we had a message through that the Japanese had retaken Wong Nei Chong from us. He was just going at the time so I told him this and that he would have to go back the long way round *via* Mt. Davis. He said: 'Damn the Japanese. I am going back that way whoever is there,' and ran up the stairs from Battle H.Q. Since then, I have been quite unable to hear anything more of him.

"I am very sorry about him, both for your sake and because I liked him and thought that he was a most outstandingly good soldier."

RALPH ST. L. PEVERLEY

Chester, England

TEMPEST IN A COCKPIT

Editor, YACHTING:

▶ I cannot help but feel that Mr. Williams' article ("The Kids? Keep 'em Sailing!" by Rod Williams — YACHTING, October, 1942) will be harmful to our Junior Yacht Racing Association of Long Island Sound because the factors which led up to the decision not to hold the races have had no publicity other than the letters sent to member clubs.

Two members of the Association recommended and urged that the Association give up, for this year, the three activities which have been of real yachting importance to our Junior Sailors for some years, namely, Junior Championship races, Midget Championship races, and the Annual Regatta during Larchmont Race Week.

▶ I was assigned to do a little checking and was surprised to find the feeling among most of the clubs was that the races should not be held, as most of the clubs could not spare their motor launches to "stand by" during the races. You know that safeguarding the youngsters when on the water is all important, particularly as many of them have had only one or two years' experience, and you never can tell what they would do in a squall.

The clubs that won the championships in 1941 (Cold Spring Harbor, the Junior Championship; and Pequot, the Midget Championship) elected not to hold these races. The reason seemed to be that they did not feel they should go to the expense at this time and they did not care for the responsibility of safeguarding the youngsters on the water as they felt that many of the clubs would not be able to send motor launches with their junior instructors as had been the practice in the past.

The association, therefore, sent out a letter identified as No. 1 to secure the reaction of member clubs, and if there had been a real desire expressed by the member clubs to have the championship races, we would in some way have arranged to see that they were run. We received only one reply. That stated that they would abide by the executive committee's recommendation.

Letter No. 2 was then sent to all member clubs' representatives, and an extra copy to each junior sailing instructor. This gave the member clubs an opportunity to state that they were interested in and desirous of the Association conducting the junior annual regatta at Larchmont. Letter No. 3 followed.

You may not know that the Association does not hold the junior and midget races. They are held by the member clubs and all expenses are defrayed by the club holding the races with the exception of the prizes, printing, notification circulars, entry blanks and the total cost of three gold, silver, and bronze medals which, for each event, runs into about $200.

This tirade is to give you the facts as presented to our member clubs and junior instructors, as I definitely feel that YACHTING should give publicity to correct the impression given by Mr. Williams' article which is definitely a distortion of the facts and might be harmful to our junior association.

J. A. B. SMITH

New York, N. Y.

NOTE: The Junior Yacht Racing Association consists of a representative group of Long Island Sound clubs. Mr. Smith, who is treasurer of the Association, refers to the article by Rod Williams wherein the writer describes how junior members of the Pequot Yacht Club continued competitive sailing despite "the wet blanket . . . that the J.Y.R.A. had decided to cancel all regattas and championship series for the season."

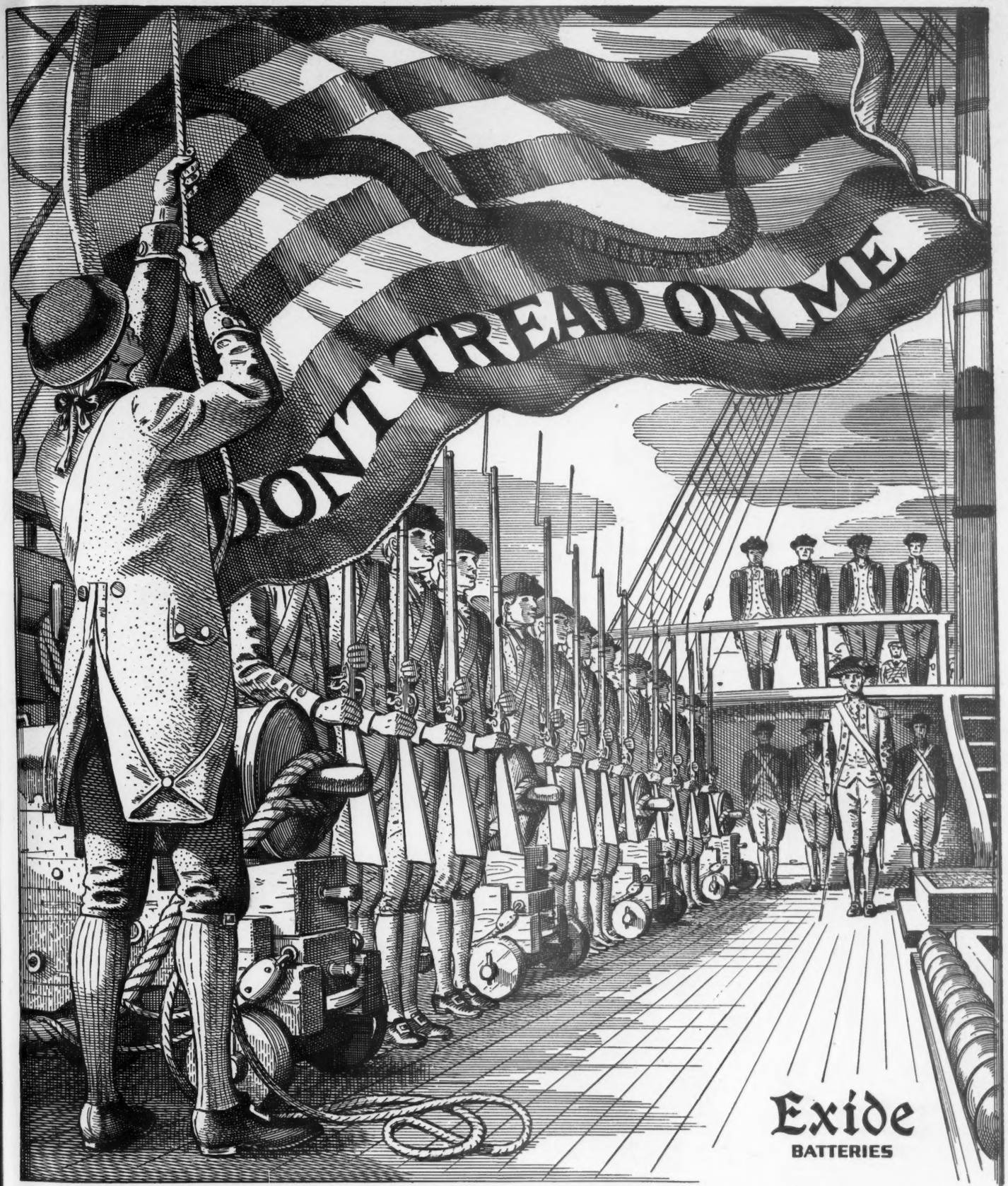
Letter No. 1, referred to by Mr. Smith, specifies that unless the majority of the member clubs hold different views, and so express themselves in writing, the proposed races would be cancelled; No. 2 states that a junior regatta might be held if sufficient interest is evidenced by member clubs; and No. 3 announces that the desire for a junior regatta was not sufficient to justify it. — *Ed.*

THE LIGHTNING CLASS CONTINUES TO GROW

▶ The Lightning Class, celebrating its fourth national championship series, staged the annual Association meeting at South Haven, Mich., the night before the first race. Vice President George Joslyn was in charge. Other officials present included Mortimer E. Graham, of the Erie Y.C., Chief Measurer, and Vice Commodore E. Gordon Cronk, of Skaneateles. Judge L. Stauffer Oliver, of Philadelphia, forced to miss the event because of judicial duties, was reëlected president for another year. Henry L. Schimpf, Jr., of Philadelphia, secretary-treasurer, and Mortimer E. Graham, vice president, were also reëlected. Other vice presidents chosen were: George Joslyn, of South Haven; Ted Siferd, of Lima, Ohio; and James M. Trenary, of New York.

The association ratified the charters of eight new Lightning Class fleets, organized since the last annual meeting in New York on December 6th. The new fleets, representing clubs from New York to Texas, are: The Southmost Lightning Fleet, affiliated with the Port Isabel Y.C., Texas; High Tor Fleet, affiliated with the Minisceongo B.C., Grassy Point, N. Y.; Bay View Fleet, Toledo, O.; Buckeye Lake Fleet, Columbus, O.; Canandaigua Lake Fleet, Canandaigua Lake, N. Y.; Edgewater Fleet, Cleveland; Irondequoit Bay Fleet, Algonquin Y.C., Rochester, N. Y.; and the Silver Lake Fleet, Silver Lake C.C., Silver Lake, N. Y.

Registrations in the class now closely approach the 1000 mark, with 47 fleets officially chartered. The most noteworthy addition to the class is a group of twenty Lightnings just completed on Lake Geneva, Switzerland. With several more boats under construction, the original group of twenty has organized for class racing and is applying for the first foreign fleet charter in the four-year history of the class.



IN January 1776, the man-of-war "Alfred" was commissioned at Philadelphia . . . and that commissioning marks the unofficial birth of a navy now fighting on the Seven Seas. Her Commodore was named Esek Hopkins. Among her officers was the intrepid John Paul Jones, and above her waved the warlike old Rattlesnake Flag. That flag, with its motto of "Don't Tread On Me" gave plain *warning* that the infant navy meant to strike—and *strike hard.*

Today, the spirit of "Don't Tread On Me" is replacing a lot of easy-going American ways. And yachtsmen can help too. Offer your own craft to Navy or Coast Guard . . . or offer your services if you can. Ask for information about the U. S. Coast Guard Temporary Reserve. Keep your boat and equipment shipshape. Obey the rules for wartime operation of private vessels . . . and stand by to answer Old Glory's call.

THE ELECTRIC STORAGE BATTERY CO.
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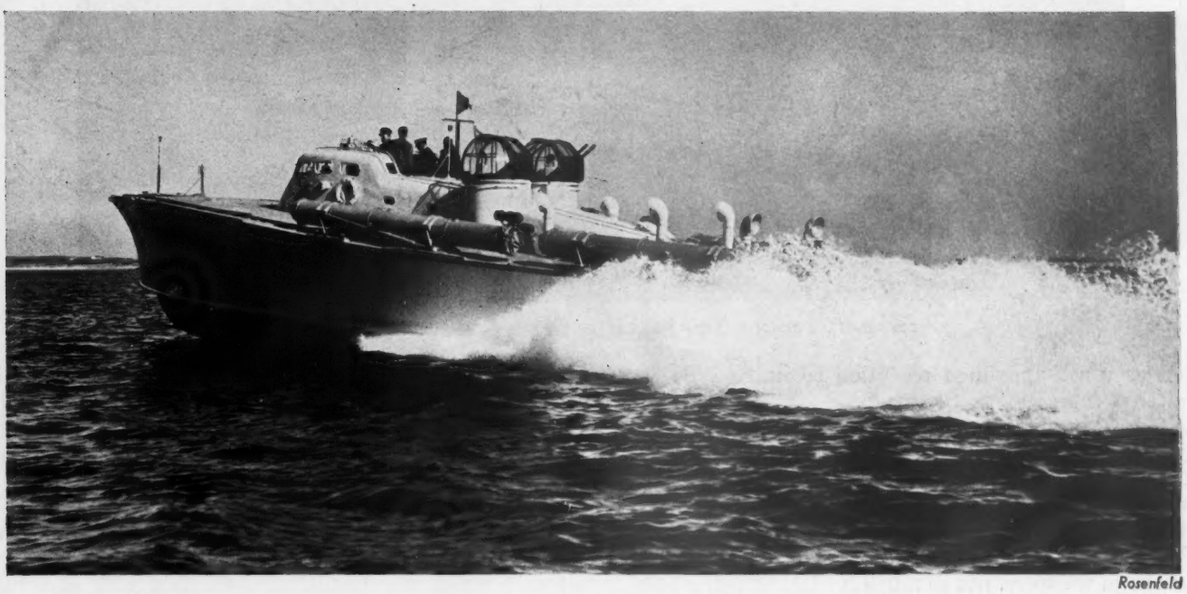
Night action in the English Channel. Two of the "Mosquito Navy" batter a German "E" boat

YACHTING

Volume LXXII NOVEMBER + 1942 Number V



Rosenfeld

This 77-foot motor torpedo boat is one of a number built in the United States, by Elco, with Packard engines, and transferred to Britain

BRITAIN'S MOSQUITO NAVY

Something About the Yachtsmen Who Serve in MTB's, ML's and MGB's

By NORMAN HINTON

Lieut. Comdr. R.N.V.R.

THE full story of the peacetime yachtsman's part in the war is a tale that will never be told. The men who could now tell it, may not, lest they aid the other side, and before the war is over they will have forgotten. No matter how vivid the impression of yesterday, the experience of today serves to becloud it in memory. And the adventure that will surely come tomorrow will push the events of today into the background. For things happen quickly in the Mosquito Navy.

This service is a full time job of work, seven days a week and seven nights as well, with the emphasis on the period between dusk and sunrise. This period, quite naturally, is the one chosen when the particular job in hand happens to consist of hanging around the entrances of hostile ports, in ear-straining silence, waiting for the softly rhythmic propeller beat that tells of enemy convoys approaching.

There may be a flotilla of six or eight boats on a job like that, MGB's and MTB's, each with her crew of nine or ten men, keyed to a note of high expectancy . . . waiting. Take, for instance, a little party that was held off Cherbourg recently.

The thin rind of the old moon was obscured by low clouds as four MGB's left their home base "in accordance with orders received." The senior officer of the little flotilla, a lieutenant-commander, R.N.V.R., glanced at his watch as he passed the word for moorings to be slipped. The deep-throated roar of the engines of the S.O.'s MGB. broke the night stillness as the screws churned the black waters into two faintly luminous bow waves which swept in angry twin torrents past the little ship. Astern of the S.O.'s boat the three other MGB's took station. The job was started.

Outside, a long, rolling swell met the S.O. as he steadied his boat on her course. Ten miles offshore, thick fog was encountered and speed had to be reduced. This created a problem, for the job in hand was one of interception and the course had been set on the assumption that the enemy would probably be at a certain spot at a certain moment. Would this hypothesis still be tenable? If so, could the MGB flotilla, at a speed necessarily reduced by the fog, manage to arrive there in time? If not, what alteration of course would be necessary in order to intercept the enemy later?

That would depend on the width of the fog belt, obviously. But how wide might it be? Was the enemy also in the fog? If so, his speed would be reduced, too, in which case, possibly, no alteration of course might be necessary.

Now, problems such as these are, pondered upon in the comfort of a warm study at home, are mildly stimulating. But in a small craft at sea, in the darkness of night, and in fog, they are apt to boggle the imagination.

But there was no time to debate the matter. The S.O. took a chance — he made a guess. It was an intelligent guess and, as things turned out, a correct one. He guessed that the enemy was making for Cherbourg.

To Cherbourg, therefore, he would go. And with a bit of luck, perhaps, he would arrive before the enemy got there

Wide World

A couple of the motor torpedo boats of the German Navy built early in the war

and act as a self-appointed reception committee. So the S.O. altered course — for Cherbourg.

The fog having lifted somewhat, the speed was rung up to 38 knots, no dawdling gait in misty weather. Anyhow, the little flotilla duly arrived off Cherbourg. There they shut off the engines and waited . . . waited . . .

The fog had now cleared and stars spangled the sky. Wind was Force 0 and the slow swell had subsided to a flat calm. Men spoke in whispers, not so much for fear of being overheard but because they had become attuned to the silence of the night. And everybody listened. The faint sound of engines — enemy "E" boat engines — stole over the waters. The sound seemed to come from the west. The S.O. ordered course 210° and "ticking-over" revolutions. The four MGB's were now within a mile of the enemy port. There they shut down and waited again.

But not for long. Soon the British were sure that their guess was correct; the "E" boats were making for Cherbourg. Well, they were there to welcome them.

Action was joined at extremely short range. It was a fair-for-both-sides fight, four against four, and whatever advantage the British gained from the element of surprise was equably balanced by the fact that the other side was "playing at home."

Adopting a policy of encirclement, our boats raced around the enemy three times, the range closing from one cable to half-a-cable. And all the while they hammered them — hammered hard. And the Germans hammered back — also hard. Soon one of the "E" boats was in flames from stem to transom, the glare lighting up the battle scene. The MGB's continued their encircling tactics, rushing around and around their quarry like Sioux attacking a prairie caravan. The shooting from the three surviving "E" boats slackened and became erratic. Evidently they had taken punishment.

Then the shore batteries opened up. And two enemy torpedo boats, lying about four cables to the SE, started firing. Star shell lit up the sky; four-inch H.E. came screeching through the air; pompoms drummed a crazy obligato as by a mad tympanist.

Suddenly, another "E" boat burst into flames, illuminating the sea like a beacon. Two of them were blazing now. The other pair was still firing, but more erratically. The two enemy torpedo boats and the shore batteries, apparently unable to recognize their friends, mis-sighted their guns and battered away indiscriminately at foe and friend alike. Seeing this, the MGB's quietly drew away, leaving the Germans to carry out a spirited engagement among themselves — which the Englishmen watched with enjoyment from a point four miles distant.

When they arrived home they had only two slight casualties and minor superficial damage to report. They would "be ready for sea to-night."

\+ + +

Although designed with high speed as a primary consideration, MGB's and MTB's are fine, handsome craft which can stand a fair share of bad weather. But motoring at a high rate of knots in choppy seas is head-cracking, bone-breaking, stomach-turning work and mind and body "holler 'nuff" before hull and engines feel the strain. The boats usually carry a crew of two officers and eight ratings. There is sleeping accommodation for all, if necessary, although when in port it is customary for the crews to live ashore.

ML's are used for coastal convoy work and are clean-lined, sea-kindly craft, which would find fair favor, furbished up with peacetime fripperies, among commuters. More than one RNVR officer has conjured up visions of ex-ML's

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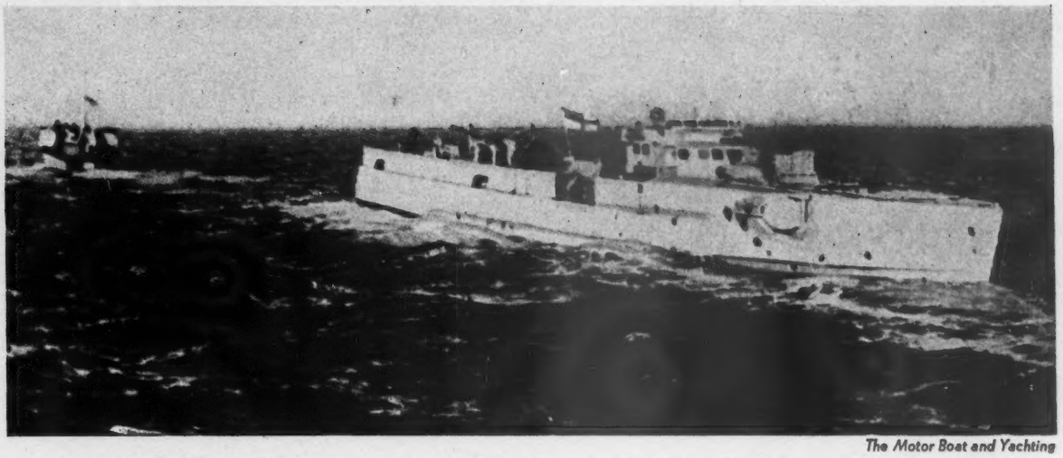
A Vosper MTB built by Annapolis Yacht Yard for the British Government. Others are building by Herreshoff, Harbor Boat, and Jacob



The Motor Boat and Yachting

Last summer, a German "E" boat was captured by British coastal craft and towed into port, considerably damaged

decked out in gleaming white enamel, with green boot-top and sparkling varnished upperworks. Two amateurs could have a grand time in one — and a grander time still if they kept a paid hand to polish the brightwork and scrub the turks' heads on the gangway handrail. Ah, well, this is no time to dream of all that; for the moment, the ML must stand out as a glorious example of the Navy learning from the yachtsman how to build a boat.

The smaller MGB's and MTB's, as their names imply, are highly specialized craft designed for specific functions, but the beautiful ML's are maids of all work, ready for any service that comes along. Their duties include convoy escort, anti-submarine patrols, mine laying, mine sweeping, target towing and air-sea rescue work, this last phrase being service parlance for high speed life-saving of aircraft crews who have "bailed out" at sea.

All mosquito craft are well armed with automatic weapons for use against aircraft or surface targets. They carry depth charges, too, and the MTB's, of course, have torpedo tubes as well. The armament is primarily offensive in character, the best defensive quality of the boats — particularly in the case of the MTB's and MGB's — being their high speed and liveliness on the helm, factors which make them difficult targets to hit.

The working conditions of the crews are arduous in the extreme. Nevertheless, these little craft are nearly always what the Navy terms "happy ships." This is mainly because every man on board, from the captain (who may be a lieutenant-commander, a lieutenant, or a sub-lieutenant) down to the greenest ordinary seaman, has plenty of opportunity to realize, by personal observation, the importance of the work he is doing.

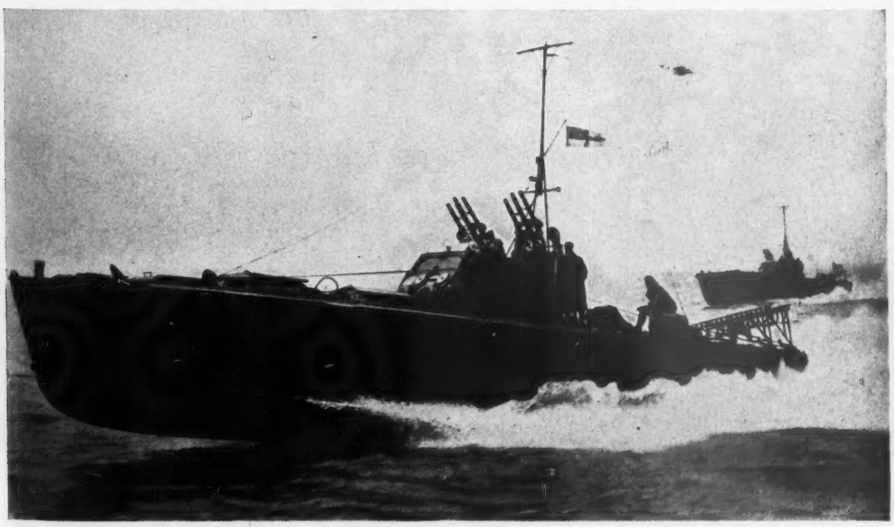
He knows that any mistake he may make, any error of judgment or minor item of negligence, may not only endanger his own life and the lives of his messmates but may jeopardize the ship as well and even destroy the chances of a successful outcome of the particular job of work in hand. Thus is inculcated in every man a tremendous sense of personal responsibility. Another factor which contributes to making these boats "happy ships" is a pleasant relaxation of the brassbound discipline of life in ships-of-the-line. This relaxation is inevitable in view of the intimate contact in so small a crew and the close quarters.

\+ + +

In the Royal Naval Volunteer Reserve training establishments, which have provided a high percentage of officers for service afloat — the majority of them peacetime yachting enthusiasts — there is enormously keen competition for appointments to MGB's, MTB's, and ML's. The qualifications include precisely those which the average keen yachtsman prides himself on possessing: a talent for pilotage, a good working knowledge of blue water navigation, a clear head in tight corners and real ability in handling a boat. The things he has to learn include flag signalling (Naval and International codes), semaphore, morse, quite a lot about gunnery, torpedoes, mining and mine sweeping. He tackles this formidable list of tasks with a zest that soon gives him a knockabout measure of competence; and bitter indeed is his disappointment if, having graduated with some distinction, he is told that he is "too old at thirty" for the physically exacting duties of the mosquito service. But there can be no question about it; it really is a young man's job.

A sub-lieutenant, lucky enough to be appointed to a boat as second in command, considers himself luckier still if the captain is of higher rank than himself, which is not always the case. The reason

(Continued on page 74)



This 60-footer was built by the British Power Boat Company, Ltd. Note the depth charge rack and the machine guns mounted amidships

"Duck, boys, here she comes!" Driving a 173-foot PC into a rising sea

Official U. S. Navy Photos

Two depth charges explode as a fast PC hunts an Axis submarine

EXACT NAVIGATION

Accurate Knowledge of Position Facilitated the Dramatic Rescue of the Flying Boat "Cavalier"

By CAPTAIN FRANK H. SPURR

One day late in January, 1939, the nation was electrified by a news flash that the 25-ton flying boat "Cavalier," bound to Bermuda from New York, had crashed at sea. Shortly after the captain of the flying boat had radioed that his plane was in trouble, the Coast Guard and Imperial Airways advised all ships in the vicinity of the approximate position of the crash, in the belief that the plane was still floating or that the survivors were in pneumatic life jackets.

The problem of locating the survivors was made extremely difficult by the fact that the exact location of the stricken plane could not be definitely established. Hence the rescue of the surviving passengers and crew by Captain Spurr of the Standard Oil tanker "Esso Baytown" was a remarkable navigational feat. (Ed.)

IN TRYING to explain how we reached a position near enough to the survivors of the *Cavalier* to hear them calling to us in the night, I should be honest enough to admit that I think our best luck was with us at the time of the rescue.

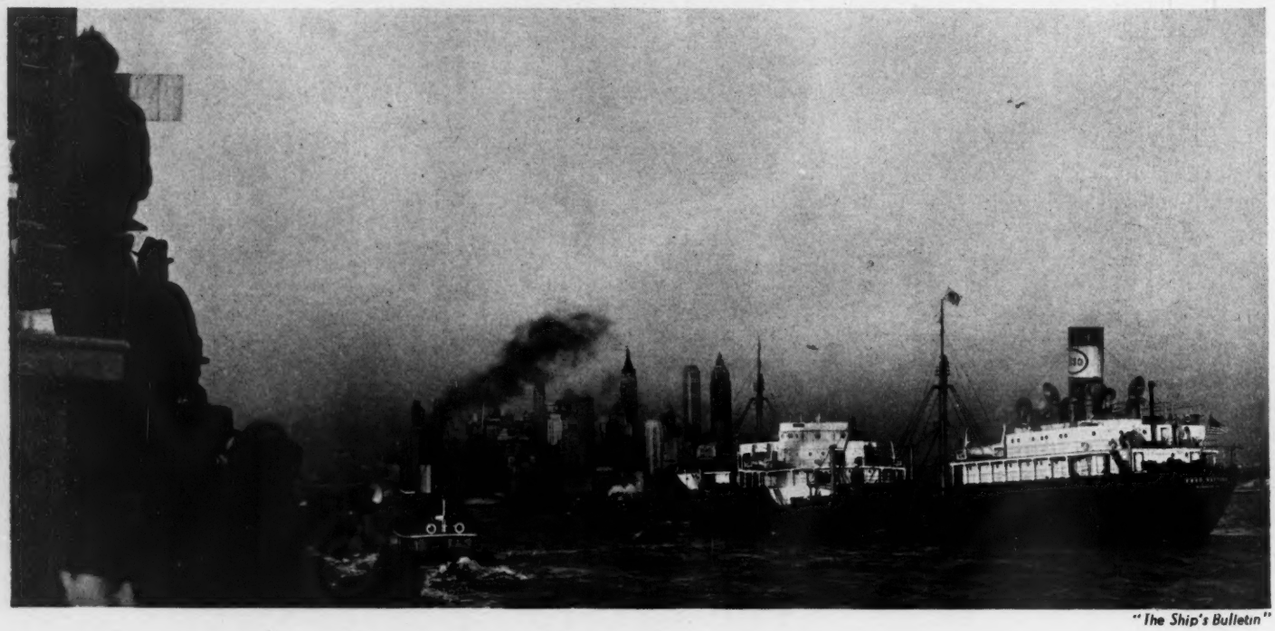
At the time I received the radio broadcast message announcing that the flying boat was in distress and was coming down at sea, I took into consideration the fact that these ships had been flying between New York and Bermuda for two years. Since they had been following the same track for so long a time, it was obvious that the Shore Office of the Airways Company (knowing the exact time the ship came down) could be expected to figure on the known speed being made and estimate quite accurately the latitude and longitude of the ship at the time she hit the water.

I had sailed from Boston on Friday morning and passed within nine miles of Nantucket Lightship the same night at 9:00 o'clock. I steered a course to cross the Gulf Stream and continue on to the northwest side of the Bahama Bank, at which point we would cross over to the Florida coast near Palm Beach. The weather was fine and clear, with a moderate sea, Saturday, until afternoon, and we had good observations of the stars at daybreak and of the sun at 8:00 a.m., noon and mid-afternoon. So we had our exact position to run from 1:30 p.m. Saturday, at which time I received the first report sent out by the Coast Guard, which advised us that a plane was in distress and gave her approximate position in order to facilitate the search by any ships near that vicinity.

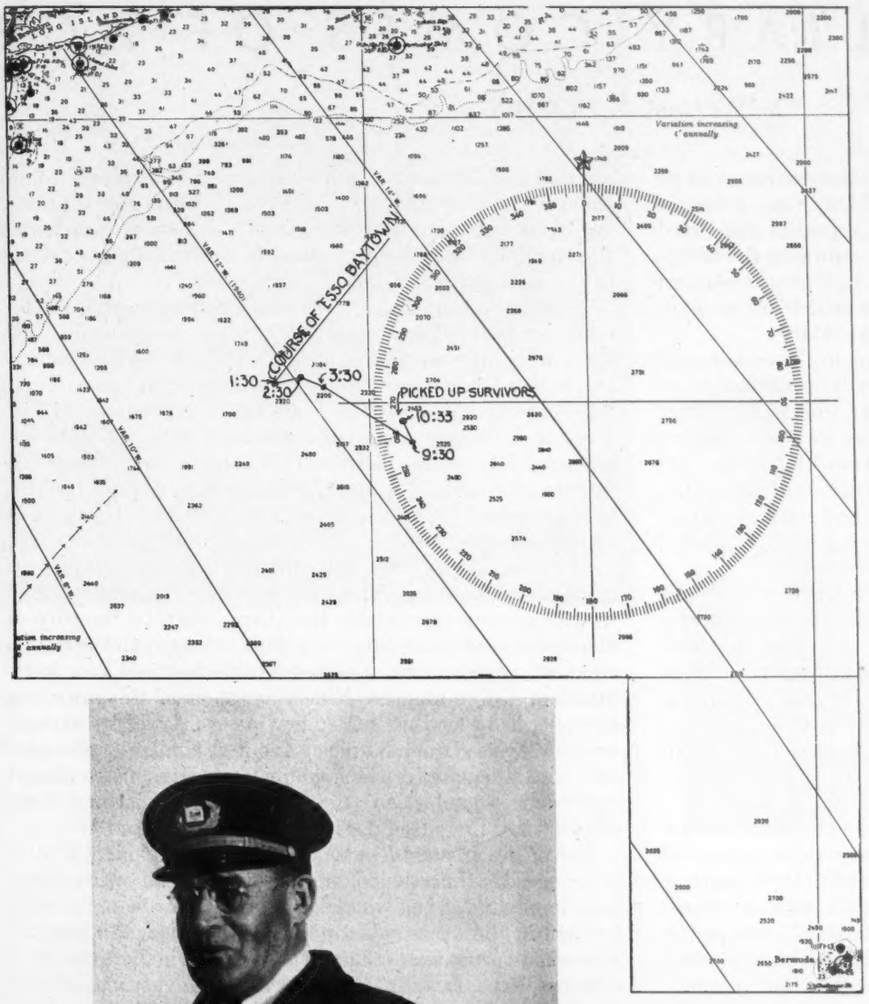
I immediately changed my course from 220° true by gyro to 75° for this approximate position and increased speed to maximum, advising the Coast Guard office at New York that I was 85 miles from that position at 1:30 p.m. At 2:30 p.m. — this time had evidently been consumed by the officials of Imperial Airways both in Bermuda and in New York in figuring as nearly as possible the spot where the plane had come down — I then received in degrees and minutes the latitude and longitude of the location at which it was believed the plane was floating on the surface.

In order to reach this position, I had to change my course from 75° to 110° true at 2:30 p.m., at which time the distance was 96 miles. At 3:30 p.m., I received another message that the plane was believed to have come down in a position 14 miles still farther south and east. I immediately changed course to 120° for this new position, and on each course allowed for Gulf Stream current set of 2° to the ENE. During the afternoon the wind changed from SE to westerly and a cold steady rain started falling, which continued until after darkness had set in. As a result, I was unable to get a check on my position by star observation before dark. I was disappointed at this change in weather conditions, but continued on by dead reckoning, by watching the engine revolutions and estimating the strength of current.

By this time I knew that several other vessels were proceeding from various directions to join in the search. I considered it quite possible that if any of the passengers or crew had survived the crash, some one of the ships, by all comb-



"The Ship's Bulletin"



ing the area, would have a good chance to hear their hails. The swell from the SE increased after dark and made so much noise about the bows that I realized I could not hear voices from any great distance. I then slowed the speed from 14 to 8 knots and then figured to reach the latest position given at 9:30. This last position I learned later had been figured out by Airway officials in New York. Though not knowing this at the time, I was becoming strongly impressed with the thought that the last previous position was the most likely one from which to start the search, so I decided to spend only a short time searching at this southernmost position before heading back up to the north and west.

The rain stopped falling at 8:00 p.m. and though it was very dark the stars came out brightly. Just at 9:30 I was about to put the wheel over to make a circle when I received a message from the Coast Guard saying that, after rechecking figures, it was now believed that the proper position was the one previous to the last. This agreed so well with my own "hunch" that I immediately headed the ship back on a 335° course by gyro and again increased the speed to the maximum of 14 knots. On this course, the old SE swell was abaft the beam and the ship ran easily. Making allowance for a few minutes in getting the

(Continued on page 64)

On facing page, the "Esso Baytown" enters New York Harbor with the survivors of the flying boat. Above, the courses steered by the tanker in accordance with the various positions received by radio. Left, Captain Frank H. Spurr (photo by "The Ship's Bulletin"), master of the tanker, and below, the "Cavalier"

Press Association, Inc.

THE AUXILIARY COMES OF AGE

By WILLIAM T. PICKERING

A WILLING but inexperienced assortment of small boat owners who assembled in our principal seaports, at the urgent appeal of the Coast Guard on the fateful day following the bombing of Pearl Harbor, has become the efficient group of men and boats which today comprises the United States Coast Guard Auxiliary.

Shivering in the cold of a late afternoon in December, clad in the nondescript garments of our yachting days, we answered the call of our flotilla commanders, uncertain of what we might be called upon to do or whether we were qualified to do it. Here on the Pacific Coast, we knew that large colonies of Japanese fishermen, Italians and others of enemy nationality lived in almost every harbor, and we had mental pictures of the gun running, fuel running and variegated sabotage we might be called upon to prevent.

Because the personnel of the Coast Guard and the number of boats then in its service was tragically small for the gigantic task of patrolling our harbors and coast line, this work was, to a considerable extent, taken over by the Auxiliary during the first six weeks of war. In this period, the Coast Guard acquired boats and men of its own in quantity and built the nucleus of the splendid organization which operates under its flag today; the Coast Guard Auxiliary acquired experience and really *organized*.

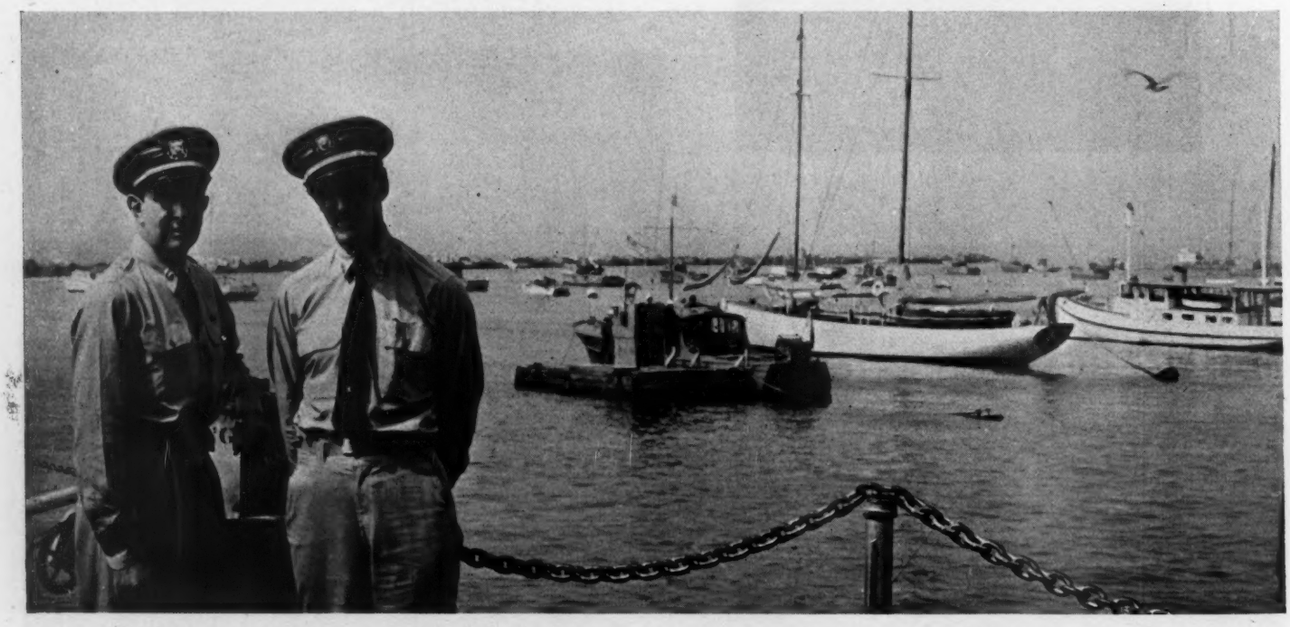
Prior to the outbreak of war, Auxiliary flotillas were few and interest in navigation and the more serious aspects of the work of the Coast Guard itself was distinctly limited. A dinner once every month or so, perhaps a couple of cruises during the summer, the study of navigation and seamanship by a few ambitious souls — this constituted the sum and substance of the activities of the average flotilla.

But, with the roar of bombs on Pearl Harbor hardly stilled, the change came with lightning speed. Yachtsmen and small boat owners by the hundreds flocked into the Auxiliary. The old flotillas were swamped; dozens of new ones were created; divisions and naval districts had to be organized and officered. Flotilla commanders suddenly found themselves snowed under with work, day and night: patroling, enlisting, organizing, teaching. Numbers of men joined the Auxiliary as a stepping stone to commissions or ratings in the regular Coast Guard.

Flotillas became sieves, as new men poured in while former members flocked into active service. Prior to December 7th, there were only six flotillas in the Eleventh Naval District: two at San Diego, one at Balboa, three at Los Angeles. There was scarcely any division or district organization. Today, there is a division comprising several flotillas in every important harbor in the district. There are division officers and district officers, and a highly developed system of instruction, patrol and coöperation with the Coast Guard itself. A similar situation exists in practically all other naval districts.

The original Flotilla 6 of this district has been renumbered twice and is now No. 52. It has had four commanders and six vice commanders within less than a year. Of the current membership of about fifty, only four belonged to the flotilla eighteen months ago. Another flotilla has had four commanders in five months. Ninety per cent of this appalling turnover has been due to men leaving the Auxiliary to enter active service. Other flotillas have had similar experiences yet, with a condition which would prove ruinous to almost any other organization, the Auxiliary has become more efficient and more useful with every passing month.

One of the greatest headaches which the Auxiliary had to solve was the question of uniforms. To begin with, there were none; and it is a wonder that a lot of us were not shot by men in the boats we stopped and boarded, thinking we were enemies bent on sabotage or piracy. Finally, in July, a uniform that met with the approval of the vast majority of Auxiliarymen was passed favorably in Washington. It is similar in general design to that worn by Coast Guard officers but the cap insignia, buttons and rank markings are different. No gold braid is worn on the arms or shoulders — a source of chagrin to some.



Walter Kane, executive officer of the Auxiliary in the Eleventh District, and J. A. Holscher, Commander of Flotilla 63, at Santa Monica

Intensive courses of instruction produced much cerebration and many comical situations. For example, an instruction cruise aboard the schooner yacht *Adore* was productive of this vivid account by one of the participants: "For those members of the U.S.C.G.A. grousing that Auxiliary life is all ashore and but a series of blackboard talks, a liberal dose of what this ship has taken for four days and nights is prescribed as a permanent panacea.

"The duty is secret, the personnel is exceptional, the latter state being due to the fact that in charge of this U.S.C.G.A. craft is the Auxiliary Vice Commodore himself, Captain J. H. Johansen, who has rounded the Horn in sail and steam more times than most Auxiliary men have ridden the Terminal Island ferry. Not too certain that any of his crew will not secretly sabotage the mainmast rather than again set the mainsail, Commodore Johansen is doing almost 24-hour duty above decks — a belaying pin in one hand and the Navy cook in the other, the latter person being determined to swim ashore if his eyes ever again see the land."

Thus do embryo Auxiliarymen and future Coast Guardsmen make light of the difficulties that attend the path of those who set out to learn the ways of the sea.

Though he does not lose his sense of humor, the Auxiliaryman takes his duties in deadly earnest — and generally gives far more time to them than he can afford and still do justice to the job that makes him a living.

Of course, the ultimate object of the instruction courses conducted by the Auxiliary is to train men for service in the Coast Guard and, at the same time, to make the Auxiliaryman better equipped to serve in his own flotilla. With this in mind, the Auxiliary gives certificates for the rank of Navigator, Senior Navigator and Master Navigator to those members who can pass the examinations. To pass the Senior and Master Navigator examinations, knowledge of celestial navigation is required and for men many years out of the classroom, the study and concentration required to accumulate the necessary information are not easy. Yet thousands of men all over the country are probably in Auxiliary classrooms sweating over problems in Seamanship, Piloting, Celestial Navigation, Signalling, Military Law,

(Continued on page 62)

The life guard boat at Santa Monica, fully manned by men of the Auxiliary. Left, Malcolm S. Boylan, Commodore of the U.S.C.G.A. in the Eleventh District, and Leonard Murray of Flotilla 61, mayor of Santa Monica

Les. T. Ordeman

Flotilla 75, U.S.C.G.A., conducts fleet maneuvers. All skippers are members of the Portland Yacht Club

"Windward," owned by W. W. Heintz, is a good example of the "Chesapeake 20." This is a restricted, not a one-design, class

BORN AND BRED ON THE CHESAPEAKE

By MALCOLM D. LAMBORNE, JR.

A STRANGER to Chesapeake Bay, attending any one of the Bay's larger regattas during the past season, might have stopped to wonder about a certain class which invariably caught the imagination of the crowd in any race in which the boats appeared. They had a way of showing their sterns to other class boats — and they were smart-appearing, too. Another thing the stranger might have noted was the fact that a different skipper seemed to win each race.

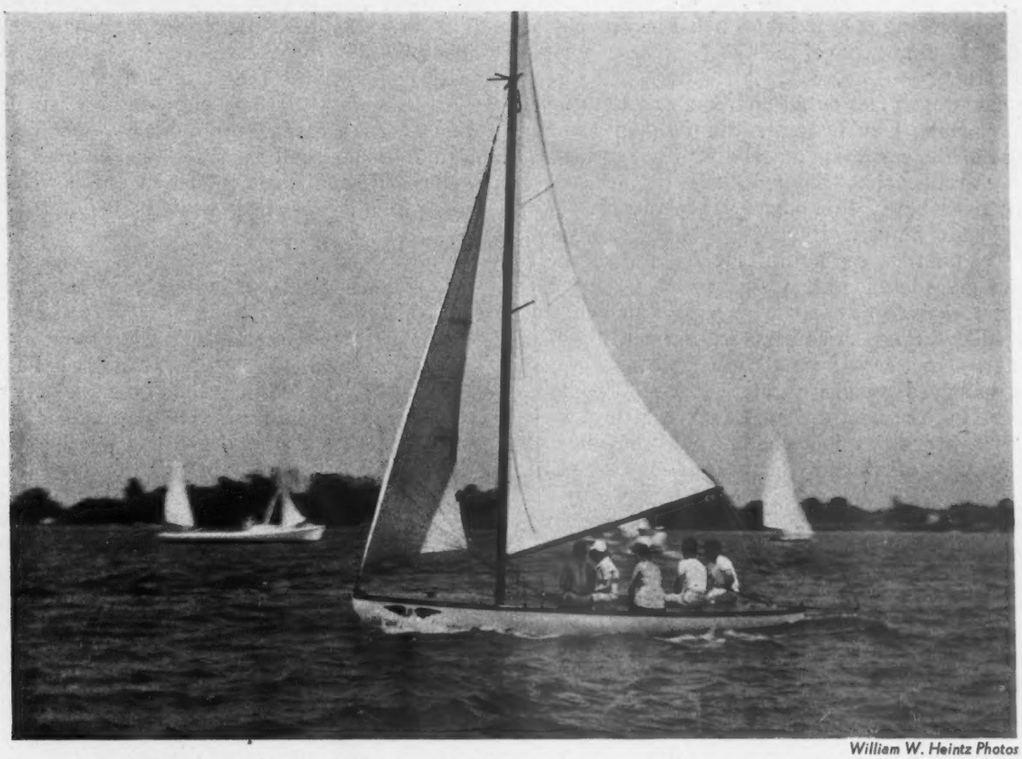
The boat in question is the Chesapeake "20." Seventy-five of the class are now registered in the Chesapeake Twenties Class Association on the Bay and its tributaries. The boats have been sailing at Annapolis, West River, Washington, Chestertown, Oxford, Sparrows Point, Cambridge, St. Michaels, Easton, Rock Hall and Alexandria.

The experience of the "20's" is proof that a class does not have to be rigidly bound by a multitude of rules and regulations to keep some of its more enthusiastic members from going all-out in building the better, faster boat to beat the other fellow. There are some sailors in the class who maintain that the boat is not a one-design but more of a development class. Class President Bill Heintz of the West River Sailing Club, which sponsored the boat, calls it an "evolution" class.

The "20's" are the product of an insistent demand in Chesapeake sailing centers for a design coming somewhere between boats of the 16-foot category (Comets and Snipes, for instance) and the Star Class. Many sailors found the Stars a little above their price range, while the former were considered not large enough. And that is why the Chesapeake "20" came into being.

Classes for knockabouts around 20 feet over all had been on regatta programs of the Bay for a number of years. There were no restrictions then — "anything goes" was the rule. Some of the boats carried jib-headed sails, not unlike the larger Chesapeake log canoes. A few, in fact, were little more than junior log canoes. As long as this condition existed, there was little chance of uniform racing.

Then, about nine years ago, a double-ended 20-footer from the board of E. H. ("Dick") Hartge, Galesville, Maryland, boatbuilder and designer, made her appearance on West River. She was known as the Albatross and plans of this class appeared in the October, 1936, issue of YACHTING.



William W. Heintz Photos

Carol Smith's "Wings" is a double-ender with a boomkin extending aft to take the permanent backstay. Here she has her full crew of five persons aboard on a breezy day. Below, "Windward" in light weather, being sailed short-handed

The boat was a centerboarder and the hull was of chine construction. She was soon outclassed, however, by another Hartge design, a 20-foot chine boat with a square transom, known as the *Seawitch*. With few changes, this design remains the same as the boats now sailing in Division II of the "20's."

It's the round bottom (Division I) "20's" that rule the class, however, the boat shown in the plans which appear with this article. The shift to a 20-footer with a round bilge came in 1935 with the appearance on West River of the Mower-designed *Vanity*, owned by Osbourn Owings, of Washington. The chine boats regularly took a lacing from her. Accordingly, by popular demand, Designer Hartge (who, incidentally, is one of the best sailors in the class) went to work on a round bottom boat, keeping in mind the better points of his previous designs and of the Owings craft.

By 1937, the new Hartge boat began to be sailed by an increasing number of sailors on the Western and the Eastern Shore of the Bay. Under a sort of gentlemen's agreement, no one carried more than 275 square feet of sail. Many had their fingers crossed none the less, awaiting the time when someone would break the agreement.

That is one of the reasons why, in 1939, 20-footer skippers of the Chesapeake gathered at the Annapolis Yacht Club to draw up a constitution for a new association and to formulate a set of restrictions governing both chine and round bottom boats. Their attitude then was — and still is — to keep as many existing boats of the same general lines racing, while at the same time encouraging new construction. They also wanted the boat to be a smart sailer. She was to be a "happy compromise of comfort and speed."

The maximum sail area was then cut to 250 square feet in mainsail and jib for, admittedly, the boats were overcanvased in a breeze of wind. The old practice of the log canoe skippers of piling on more human ballast when it began to blow was spiked, too. The maximum crew, including skipper,

was set at five. Five might seem like a rather large crew for a 20-footer but this is not true of the "20's," since they have a roomy cockpit.

The boat has proved fast on all points of sailing in both light and heavy going. Obviously, she will not point as high as a keel boat of the same size but she will foot as fast or faster. And it's the boat that "foots the fastest in the leastest time," as one sailor put it, that comes in the winner.

The "20's" show an attractive profile, both in sail plan and in hull. The boat has a clean run aft and a moderately full bow which gives her good buoyancy and keeps her dry in the Bay's notorious short chop. Even with rail down, the clean run is evident. Since these boats are frequently sailed in shoal water, they carry a centerboard made of wood which, when ballasted, weighs no more than 150 pounds. With the board up, the boat draws but seven inches; with the board all the way down, four and one half feet. She can be sailed in two feet of water by simply pulling the board half way up.

The boats have capsized without filling with water or even taking in a drop. One of the crew slides out on the centerboard and up she comes. By the same token, the boat can be readily heeled over on her side from a dock. The crew is then able to get at her bottom for scrubbing and sanding down. The "20" also can be hauled easily and loaded on a two-wheel trailer for transportation overland.

Either permanent or running backstays may be used, although the majority of skippers use the permanent arrangement attached to a boomkin. The sail plan is well balanced, with a slightly overlapping jib. Currently, the diamond rig, with two spreaders, is the most favored for shrouds. Here are the restrictions governing Division I "20's" (Division II restrictions are almost identical) as written in the class By-Laws:

"Length over all, not more than 20 feet, exclusive of bowsprit, boomkin or outboard rudder. Length of yacht is to be determined by the distance from the intersection of the fair sheer line with the center line, to the intersection of the transom with said center line or between perpendiculars, whichever is greater. A blunt stem of one inch shall be permitted. Boats shall be shipshape in form, with a single centerboard and single rudder. A one per cent tolerance in length shall be permitted boats built prior to October 15th, 1939.

"Beam: Not less than six feet, exclusive of rubbing strakes.

"Bow: Conventional; scows ineligible.

"Centerboard: Weight not to exceed 150 pounds.

"Skegs: If used, they shall be made only of wood.

"Ballast: Prohibited, except as used in centerboard.

"Hull: Wood, of not less than ½-inch thickness.

"Sails: Not more than two working sails of not more than 250 square feet, measured by simple triangulation between centers of grommets; provided, however, that sails now owned or ordered by owners which comply with either the former or the new rule shall be permitted. Light sails are prohibited. No sails shall be changed during a race, except in an accident and then with permission of the Race Committee.

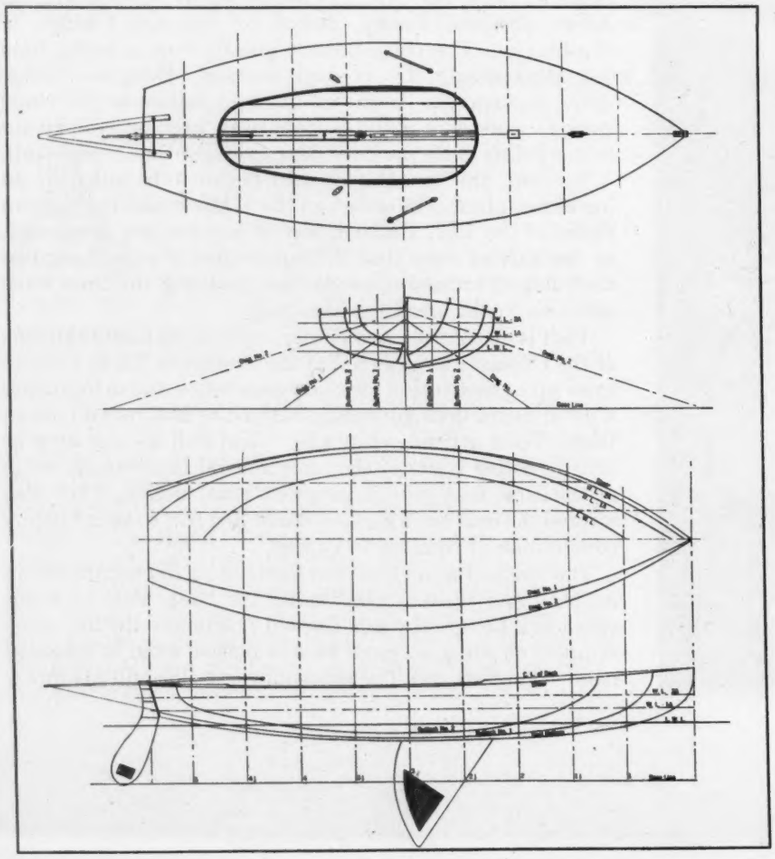
"Mast: No revolving masts permitted. The fore and aft dimension of mast shall be restricted to six inches.

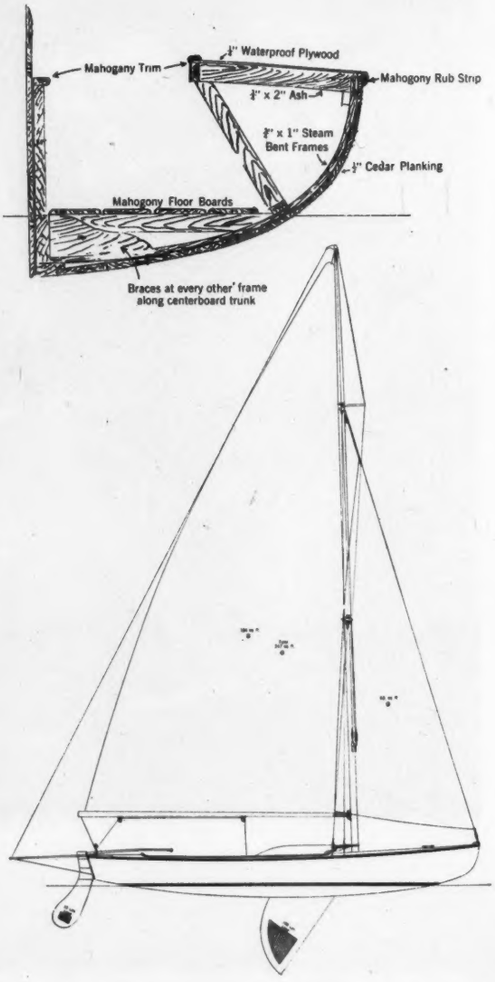
"Crew: Limited to five persons, including crew."

The fact that no skipper dominates the class is the result of the "20's" being almost identical and of the skippers being smart sailors. Even with the basic restrictions, there has been little expensive building of boats. The men sailing in the class are of moderate means and do not hanker for the super "20" to beat all "20's."

That is why Chesapeake "20" owners are confident that their class has a long future ahead on Chesapeake Bay.

Lines, sail plan, deck plan and 'midship section of the "20" designed and built by E. H. Hartge. She is 20' l.o.a., 15' 7" l.w.l., 6' 7" beam and 7" draft of hull. Sail area is 247 square feet, 184 in the main and 63 in the overlapping jib




Mahogany Trim
¼" Waterproof Plywood
Mahogany Rub Strip
¾" x 2" Ash
¾" x 1" Steam Bent Frames
½" Cedar Planking
Mahogony Floor Boards
Braces at every other frame along centerboard trunk

Captain Sears, Master of the New Bedford schooner "Eveline," boarded the "Amistad" off the coast and provided water and provisions

MUTINY IN THE "AMISTAD"

Part I—The Ghost Ship is Reported off the Coast

By MARGARET WALLACE

IN THE early summer of 1839, disquieting rumors began to drift into the ports along the Atlantic seaboard. Sailing craft and fishermen bent on their lawful errands had begun to sight and report the presence of a mysterious black schooner, seemingly bound for nowhere. Sometimes she was seen heading east. Again she was coasting along toward the north or northwest, apparently making for New London or Long Island Sound. According to others who had seen her, she was on an erratic and aimless course difficult to account for by any reasonable conjecture.

Attempts to speak her met with little or no encouragement. Friendly hails were often deliberately ignored. Too inquisitive fishing smacks had been waved off with threatening gestures. One thing was agreed. Her appearance was sinister in the extreme.

She was a long, low, black topsail schooner, estimated by those who saw her to be anywhere from 60 to 100 tons burden. Her sails were stained and torn, her topsail yard missing. Her sides were foul with barnacles and seaweed. Most of her paint was gone, but some vessels had come close enough to make out the name *Amistad*. This, with a gilt eagle at her bow, afforded the only clue to her identity. There appeared to be no one aboard except a crew of negroes, some of them half naked, others dressed in absurd finery, shawls and beads and embroidered blouses. They were armed to the teeth with pistols and cutlasses.

A flurry of excitement and alarm ran along the coast towns. Peaceful householders in Sag Harbor and Greenport and New London were convinced that she was a pirate craft hanging about offshore and waiting for a favorable moment to descend upon them with fire and sword. Others thought she might be a pest ship. Her stench strongly suggested it to those she had passed to windward. Some of the simpler sailors who had glimpsed her as she slipped away into the fog were persuaded that she was a ghost ship, a phantom as menacing and impalpable as the Flying Dutchman.

Leading newspapers — the Boston *Atlas*, the New London *Gazette*, the New York *Commercial Advertiser* — began to carry stories about the strange appearances and disappearances of the *Amistad*. Orders went out to the commanders of naval vessels on the North Atlantic Coast to overhaul and examine her.

This was easier said than done. She never appeared twice in the same place. One day she was sighted off Sag Harbor, her torn sails slatting idly in the breeze, her chains festooned with marine grasses, her strange black crew lounging about the decks. The next day she was hailed far out at sea, slogging along in a businesslike way, apparently headed for the Azores. Fears and rumors swelled and spread as the month of August advanced.

The Columbian *Sentinel*, on August 24th, broke the most circumstantial story concerning the sinister black schooner. Captain Sears, master of the schooner *Eveline* of New Bedford, put into Wilmington with the report that he had encountered the strange craft some days before, about seventy miles from Egg Harbor. She was, he said, a sharp, coppered topsail schooner, about 80 tons burden. There were some thirty blacks aboard and he understood from their signs that they wanted water. He lay alongside and boarded her.

She was filthy beyond belief. Her jibs were in ribbons. The decks were strewn with weapons and goods, broken bales of cloth, boxes of raisins and vermicelli, umbrellas and pictures and crockery and looking glasses. The crew were half naked, their ebony skins gleaming. Some of them wore embroidered cambric shirts, or shawls of Canton crepe twisted into loin cloths. Others sported wide brimmed hats of the sort favored by planters in the West Indies. Around the windlass three dusky little girls, not more than twelve or thirteen, were playing contentedly.

Crouched beside the cover of the forward hatch was the most extraordinary figure Captain Sears of New Bedford had ever beheld. A naked black, a cannibal the Captain felt sure, with inhumanly staring eyes and filed teeth which projected almost at right angles beyond his thick lips. On the hatch cover lay a bundle shrouded in black bombazine. The Captain touched the bundle curiously, then pulled the cloth aside. He stared incredulously at a twisted negro body with open mouth and glazed eyes. The savage guardian of the corpse neither stirred nor blinked.

Captain Sears evidently felt that there was a point where curiosity ended and prudence began. The negroes who seemed to be in charge were well armed. As nearly as he could make out their story, from their signs and a few words of Spanish and English, they had been at sea about three months. The captain was sick and all the white people had been washed overboard. They wanted water. There was plenty of money, they indicated, showing him doubloons.

He gave them a cask of water and some provisions, for which he received a doubloon, a gold coin worth at that time about $15, and some small silver. Then — thinking no doubt of salvage claims — he took the *Amistad* in tow and towed her until dark, when he estimated they had made about thirty miles.

As night came on, a thick fog rolled in. In spite of the doubloons, Captain Sears must have felt uneasy about his singular charge. He heard, or thought he heard, an English voice from the deck of the *Amistad*. Someone aboard the black schooner was ordering sail made, with the apparent intention of overhauling the *Eveline*. Hastily Captain Sears cut his towline, abandoning his water cask and part of his cable, and hove to in the fog until morning. He saw no more of the *Amistad*.

Nor did anyone else for several days afterward. Then the pilot boat *Gratitude*, Mr. Seaman boatkeeper, spoke her about twenty-five miles east of Fire Island and ran within several yards of her, intending to put a pilot aboard.

Several of the negroes, whom Mr. Seaman took to be the leaders, waved the pilot off with threatening gestures. At the same time one of them, a determined looking fellow with a pistol in one hand and a cutlass in the other, kept his own followers back. It seemed to Mr. Seaman that most of those aboard would have been glad enough to have a pilot. When the leader's back was turned, several of them beckoned timidly for him to come ahead. The black schooner was last seen standing east about twenty miles from Montauk Point.

So the summer drew to a close and the mystery seemed no nearer a solution. As rumors and newspaper conjectures multiplied, so did the curiosity and anxiety of the public. The long black schooner was already well on her way to becoming a legend of the sea.

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In June of that same year the *Amistad* had been a trim enough little craft, a fast Baltimore-built schooner with a clipper bow and good clean lines. Ramon Ferrers, her captain and owner, was proud of her and justly so. He had used her mainly in the sugar trade and had never carried slaves before.

On the morning of June 28th, while the *Amistad* lay at anchor in Havana Harbor about a musket shot offshore, Captain Ferrers was nervous. A little nervous, but not very. The slaves, forty-nine prime blacks, were below decks, securely ironed, feet, hands, and neck. They were all fresh from Africa. They had been purchased by two Spanish sugar planters, who had marched them aboard the night before from the barracoons on the edge of Havana.

The slave trade at this time was illegal, having been abolished in 1820 by joint treaty between England, Spain and the United States. But negroes already in servitude when the treaty was drawn were considered legitimate property. The fact that the *Amistad's* present cargo had been in Cuba only ten days or so was well known to the authorities, who overlooked it for the regulation bribe of $15 a head. When Captain Ferrers went ashore to pick up his clearance papers, he had no reason to anticipate trouble, although the gunports of American and British men-of-war frowned on him in the harbor.

The fact was that this was all pretty standard practice. The law had no teeth in it. American-built ships — most of them, like the *Amistad*, out of Baltimore — regularly proceeded to the coast of Africa with trade goods and brought back, under the Portuguese flag, shiploads of slaves for Cuba. Cuban sugar for the States formed the third leg of a profitable triangular trade, with which the consular authorities, amiably hoodwinked by the Portuguese flag, saw no reason to interfere.

Nothing could have seemed more innocent and peaceable than the trim little schooner riding at anchor in Havana Harbor on that clear, hot June afternoon. Under an awning on the after deck, two comfortable Spanish gentlemen took their ease and sipped tall drinks while they waited for Captain Ferrers to come aboard.

The scene was, if anything, almost ostentatiously domestic. Four negro children, three half-grown girls and a boy about seven, romped and scampered around the decks, careful to stay out of the way of the Spaniards. They yelled at each other unselfconsciously, their thin voices floating out across the water toward the lowering men-of-war as happily as if they had been playing in the mud streets of a Mandingo village. They were healthy youngsters. Don Pedro Montez, who had got them at a bargain, eyed his property complacently.

Montez was an elderly man, comfortable of girth, with iron gray hair. His skin, under its native tan, had a dry and sallow cast. He looked, and indeed was, a sick man. Without turning his head, he shouted for the cabin boy to replenish their drinks. His voice, which brought little Antonio scurrying, was unexpectedly authoritative. Ill heath had forced him to retire from the sea and take up sugar planting but he had not lost the habit of command. Montez was not so ele-

gant as his young companion, and by no means so rich.

The forty-nine blacks herded below decks and broiling there under the Cuban sun belonged to the young Don José Ruiz. He had chosen them himself, prodding their muscles, looking closely at the whites of their eyes, opening their mouths to be sure their teeth were sound, careful to see that none was ill of the flux or the fever. He had marched them through Havana himself the previous night, ironed two by two. They had cost him an average price of $450 apiece. Adding their transportation to Guanaja, and the expense of procuring papers describing them as *ladinos*, they represented an investment of better than $30,000.

Ruiz was a handsome and lively young man, with dark hair and white teeth that flashed when he smiled, which he did frequently. In spite of lack of sleep, for it had taken most of the night to get the slaves aboard, he was in excellent humor. The rum was fine, and so was the afternoon.

Antonio, the cabin boy, an impudent little negro of nine or ten — a real *ladino* who chattered in Spanish like a monkey — brought the fresh drinks. Spruce in white pantaloons, he grimaced fiercely at the Mandingo youngsters. They could not understand a word of the gutter Spanish he flung at them, and perhaps it was as well, but they stared at him with round, black, frightened eyes. He would have liked to stop and tease them a bit, as he had done this morning before the gentlemen came aboard. But discretion got the better of that impulse. The very model of a brisk and well-behaved cabin boy, Antonio scampered back to the galley.

About four in the afternoon, Captain Ferrers came aboard, rowed out to the schooner by the two seamen who formed his crew. Everything was in order, he assured his passengers. He had the papers, which described the slaves by their Spanish names, and they could sail at once. He ducked down to his own cabin and came out again, giving orders to Manuel and Jacinto for sail to be made. With Captain Ferrers himself taking the wheel, the *Amistad*, heeling gently in a light breeze, headed for the mouth of Havana Harbor.

Montez stared morosely at the sky. "This won't last long," he predicted comfortably. "We're going to get some rain before long, Pepe. Perhaps rough weather."

Ruiz laughed. "What does it matter?" he asked. Everything, so far as he could see, had turned out most fortunately. Sometimes it took only two or three days to sail the three hundred miles to Guanaja, Puerto Principe. Sometimes two weeks or more. It was not in Don José's nature to worry about trifles like that.

An American topsail schooner of the period and type of the "Amistad." From Chapelle's "The Baltimore Clipper," courtesy Marine Research Society

"We've got all week, Pedro. All month, if you like. And there is plenty of rum aboard, our good captain tells me."

As they passed below the medieval bulk of Morro Castle, the dull boom of the sunset gun echoed across the water.

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The negroes, in irons below, heard it too. They knew from the roll of the ship that they were under way at last. Where they were bound, or for what purpose, was something they did not know. The uncertainty was not less cruel because they had had three or four months already in which to become accustomed to it.

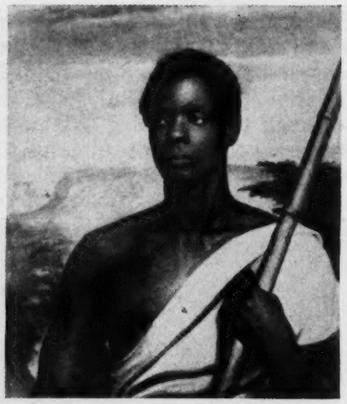
Banna, who was a blacksmith in his own country, had been to the coast on trading trips. Almost alone of them all he commanded a few words of the white man's language. Their new owner, the smiling young man, was called Pipi, he said. But he had not been able to make out from any of the conversation he had overheard where they were being taken.

There was some gossip and general speculation about it before the heat and stench of the *Amistad's* hold, the torments of thirst, and the initial qualms of seasickness, discouraged even that effort. Some of the slaves were gray and sweating with illness even before the *Amistad* weighed anchor. Negroes from the interior of Africa were much more susceptible to seasickness than the average white man. Many of them had nearly died of it on the long voyage to Cuba, and some actually had.

By late afternoon they sat or lay, two by two, panting in

the torrid heat. It was a problem whether to sit or lie. They were chained together in couples, with irons at wrists, ankles, and neck. Any position had to be taken up by agreement. At night, as a further precaution, and perhaps because the *Amistad* was short handed, a long chain was run through the neck irons, fastening each couple to those before and behind. When this chain was in place it was difficult for any except those nearest it to reach the wooden bucket which was their only sanitary convenience.

Often bitter fights broke out. There was always someone who objected to being stepped on, or to being jerked rudely out of what uncomfortable sleep he had managed to snatch. Others quickly abandoned any effort to reach the bucket. The filth and stench multiplied as the hours wore on. But these men were toughened graduates of three months in a Portuguese slave ship and endured their misery with what patience they could muster.



Cinque, leader of the slaves who rose and took the schooner

The patience of Cinque, however, was wearing perilously thin. Not because of his physical discomfort — he was a vigorous young man, not quite twenty-six, and better able to endure hardship than most — but because the hope which had kept him alive all these long months was flickering out. Cinque meant to go home again. He had bent every waking thought during these long months to that single end. And somehow he had never doubted that he would.

Ten days' march into the interior from the slave factory at Lomboko, Cinque had a little rice plantation of his own. He had a wife and three children. Somehow he meant to get back to them. It was the little boy, the merry, lively, six-year-old Ge-won, he thought most about.

Aboard the slaver, when they were brought up from the 'tween decks for exercise, Cinque each morning had looked for the sun and carefully noted the ship's course. As well as he could, with his landsman's eye, he had tried to estimate her speed. Scrupulously he had kept count of the days. Every lengthening mile was something he would have to retrace. How he would do it he did not yet know, but he had not doubted that he would.

Only in the black schooner, for the first time, he was really frightened. When they were marched to still another ship, penned below decks, and started on another voyage to an unknown destination, his courage wavered. He might never find Africa again. In the place where they were going he would not know how to ask his way.

"Sierra Leone," he thought. He thought it so hard that he muttered it aloud. "Sierra Leone."

He had never been there. It was only a name to him. But it was on his own coast. Surely, wherever he went, they would have heard of Sierra Leone.

Somehow it seemed to Cinque that this new uncertainty was more than he could bear. Through Grabeau, a shrewd little middle-aged man with a short, tightly curled beard who was ironed next to him, Cinque started a message forward to Banna. It was relayed along the line.

"Ask them where we are going. Ask them what will become of us when we get there."

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Twice a day on board the *Amistad* the slaves' leg irons were removed and they were herded up on deck to be fed. The food was a mess of boiled rice and yams, with sometimes a piece of salt meat, served in wooden tubs. The negroes were gathered ten or twelve around a tub and the two seamen, with cutlasses and whips, stood guard while they ate.

In the Portuguese slaver, where seasickness took such fearful toll, they had been forced to eat. No negro had been allowed to refuse his food. Anyone who tried to do so had been forced to stuff himself until he vomited. The death rate had been high enough without adding weakness from starvation as a possible cause.

In the black schooner, there was not food enough. All went hungry, and those who were not quick and ruthless enough in the daily scramble at the food tubs went very hungry. Also, discipline was less strict in the *Amistad*. During the first two or three days, there had been no attempt at morning exercise, no dancing up and down on deck to the clank of irons and the ugly sound of the whip as it bit into limbs stiff from a night in the 'tween decks.

From these circumstances, Cinque rather thought that their voyage was to be a short one. White men did not, in his experience, allow a slave to lose his appetite or to lie down and die in peace.

There was even less water, and that issued in tantalizing rations. The negroes were used to this, in so far as thirst was something to which a man could grow accustomed. Slave ships never carried water enough. A full grown black — worth $8 in trade goods at Lomboko, and perhaps $500 in Havana — took up scarcely more room in a ship than a small water cask.

But on the deck of the *Amistad* the water cask stood in full view of the negroes while they wolfed their rice and yams. After a day in the sweating oven below decks it was a temptation almost past bearing. Two of the negroes, driven by thirst to forget what they knew about whips, edged toward it casually. One held an empty pannikin in which his scant ration of water had been doled out.

There was an outraged roar from one of the seamen. A whip whistled and struck. The two slaves dived for the shelter of the group at their food tub. They were seized and dragged out again. One of them howled for mercy; the other cowered stolidly, flinching when the lash fell. Sweat and blood dripped from the ebony backs and spattered on the deck.

The little cabin boy had scrambled up on deck to watch the fun. He was joined by the cook, an undersized mulatto with pock-marked skin, who carried a bottle of vinegar. Through stained and broken teeth, the cook grinned at Antonio and shook the bottle importantly.

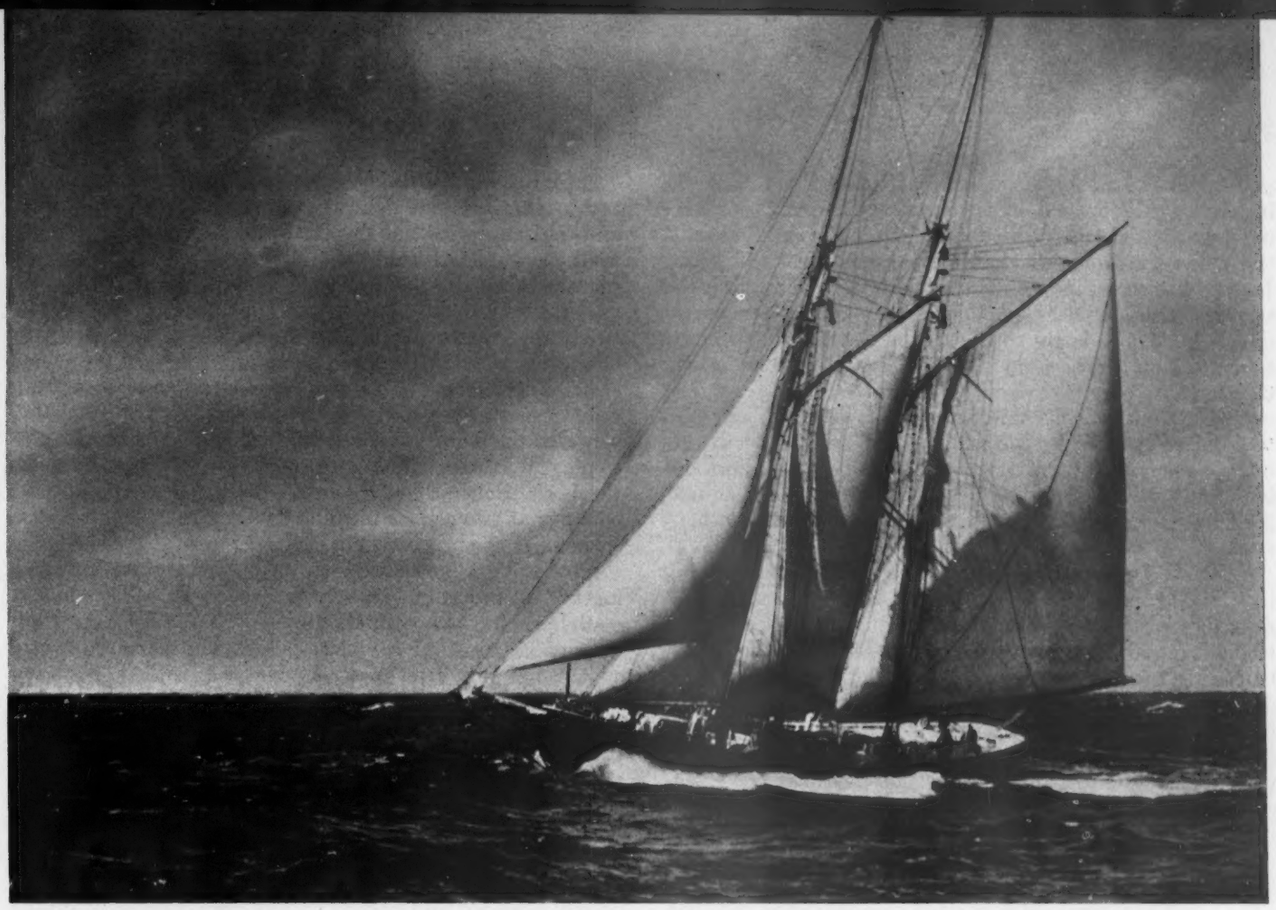
"You watch, boy. This'll make 'em feel better. Give 'em a good dose of vinegar and wounds don't mortify hardly at all."

Cinque did not watch. He knew from experience what vinegar — and salt, too — felt like on a back peeled by the whip. Instead he searched through the press and huddle of slaves until his eye caught Banna's. For a moment their unblinking glances held. With the barest perceptible motion of his head, Cinque indicated the cook and the cabin boy. The stocky blacksmith's eyes flickered in response.

When the slaves were herded below, Cinque hung back, watching apprehensively. Banna, and a young negro named Bartu, whose wrist was ironed to his, sidled toward the cook. Banna asked a question haltingly, timidly. He repeated it as the mulatto frowned. Antonio said something in rapid, too rapid, Spanish. Then he began to rephrase the question in some African tongue. Banna bobbed his head apologetically and tried again.

Bartu stood straight and silent, taking no part in the ex-

(Continued on page 64)



The "Oretha F. Spinney," a Gloucester fishing schooner, masquerading for the movies as Disko Troop's "We're Here"

SAN PEDRO TO KEY WEST IN WARTIME

A Famous Gloucester Schooner Abandons the Movies for Trading in the West Indies

By CHARLES PETERSON

THE "Admiral Benbow Inn" of this narrative was on 52nd Street, New York. It was there, on April 10th, 1942, that this sea-hungry writer met Sterling Hayden and, over lunch, discussed signing on with him for his forthcoming voyage from San Pedro, California, to the West Indies.

For many years I had dreamed, connived, annoyed yacht brokers, visited boatyards. I had tried to trade my farm for a ketch and had almost driven the good wife silly with my plans. Frustration had dogged every attempt to get away and now, in the tinkling of an 'ighball, the whole thing was arranged. What possessed this best of sailors to make me ten per cent of his crew — me, a sailor of 17-foot sneakboxes and 27-foot sloops — I cannot imagine unless it was that he saw in my eyes that fanatical glint which so often helps compensate for ignorance. Besides, I am a carpenter of sorts, and willing as hell.

My own problem was that, in order to make the voyage possible I must sell a magazine article and this I did that same afternoon — an article and color photographs on the new Caribbean Maritime Commission and the return to sail for wartime cargo work.

The ship was the 120-foot Gloucester schooner *Oretha F. Spinney* which had been lying in San Pedro Harbor since her part in "Captains Courageous" in 1936–37. Hayden had just bought her.

Just one week later, Sterling met me in Miami and we spent three dull days there waiting for the Bahaman crew to arrive from Nassau, where he had rounded them up. We visited the pawn shops, looking for binoculars and a chronometer, went swimming at the Bath Club, and finally got the crew off the plane and onto a bus for the cross-country trip to California. (Not a word about that nightmare of five-minute meals, constant changing of buses and rechecking of bags.) Finally, to arrive in San Pedro and set foot on the ship, grimy as she was from years of neglect, was like entering a cool theater in August and relaxing with a movie of the South Seas.

And now meet the crew as they emerge from the fo'c'sle for the first day's work, in dungarees in place of the store clothes of the last five days. They are all black but one. Their faces are interesting.

Granville Conolly, Mate, Grand Cayman, 46, 5′ 10″;
Cyril Jones, Engineer, Jamaica, 38, 5′ 9″;
James Lightbourne, A.B., Turk's Island, 39, 5′ 9″;
Richard Mitchell, A.B., Abaco, 23, 6′ 2″;
Bruce Green, A.B., Abaco, 32, 5′ 8″;
Bertram Bevans, A.B., Andros, 27, 6′ 3″;
Joe Williams, Cook, San Salvador, 41, 5′ 7″;
Wm. Grist, A.B., Nassau, 17, 5′ 10″, white.

The next thirteen days were spent at the endless jobs necessary in fitting out a schooner for sea. Bo's'n's chairs were rigged first and several of the crew worked for days until the spars were all scraped and greased, the standing rigging tarred, lanyards set up, blocks repaired and running gear rove. Decks were scrubbed, galley stove relined and

polished, water tanks cleaned and refilled. Grist and I, working from a skiff, spaded off the barnacles. I went to work removing a rotted 18-foot section of covering board and refitting a new one around the bulwark stanchions. At this point, I would like to get in my little say with the opinion that the Gloucester shipbuilders, excellent as they are in their general design, gave no thought to ventilation of hull. They seemed to make a point of ceiling the hulls up tight, thus making them an easy prey to dry rot.

I sorted out bo's'n's stores and built parts cabinets and tool racks. The "Chief" overhauled the six-cylinder Bessemer Diesel. Sterling was busy at the chandler's, the port and Navy authorities, swinging ship for deviation, and untangling red tape. This finally unraveled enough, on May 9th, to allow the *Spinney* to sail for San Diego and hauling out.

We were soon jogging along to a light breeze and feeling the deck heave to the swells outside. The watches were arranged (four on and four off) and I found myself at sea at last and actually at the wheel, a thrill for this long-thwarted-land-bound-son-of-Norway. The first night shut down and I do not think I went to sleep for watching the phosphorescent bow wave or listening to the water, separated from me by five inches of plank and ceiling, gurgling by my bunk. And I venture that Sterling himself must have been thrilled, seasoned old salt that he is, for this was his own ship, his own command.

Dawn found us off San Diego. By mid-morning we were started up the ways and were high and dripping by afternoon. All hands anxiously awaited a sight of the hull but they were hardly prepared for the perfect specimen of Gloucester fisherman they found in the 21-year-old *Spinney*. Every seam was smooth and even, every plank like rock. Word got around and we soon had a steady stream of admiring visitors, some of them native Californians come to scoff at something from the effete East, but knowing when they left that they had seen one of the sweetest sailing hull designs ever turned out.

One-third of the rudder was gone but that was an easy job for the yard. All she needed was scraping, painting and some seam cement here and there — or so we thought at the time. In two days, we finished her bottom work and she went down the ways again, ready for sea at last and waiting only the official sanction to be off.

Just as we were about to sail for Panama, the first misadventure occurred. I had gone to town for my supply of color film for the magazine story. Sterling greeted me on the dock with: "Got some bad news for you; the officials say positively no cameras allowed to enter the Canal Zone."

"Good Lord! what'll I do?" was my first reaction.

"We can leave your outfit with my mother and have her ship it to the next port after Panama and do the pictures then," Sterling volunteered.

And so the complete kit, except for meter and lens-shade, was deposited in Mrs. Hayden's car and we cast off. Only a photographer can feel the irony of my position: a cruise like this, in the saltiest of schooners, with nothing to record it. I thought of the scenes I had planned — close-ups of the crew's faces; their sweating bodies hauling on a halliard; the play of sunlight and shadow on rigging and sail; some mountainous seas and tropical sunsets — oh, well, write your own ticket. I hoped for the best but I went about like a robot.

By late afternoon we had the four lowers on her and were running before a northwest breeze which was to hold fairly steady for several days. There was a heavy ground swell, too, which gave the ship some motion, and, by early evening, a third of the crew, including myself, were acquiring that apathetic stare and clammy feeling that comes with the first day out. A few doses of medicine fixed us up and there was no more of that for the rest of the voyage.

On the second morning came catastrophe number two. I had just turned in at eight o'clock when Sterling sent for me and told me to look in the lazarette. I crawled in and saw what every sailor dreads above all: sea water sloshing around, running down the horn timbers. The devilish part of it was that the leak was concealed under a ceiling of 2½" oak securely spiked down by master shipbuilders. There was only one thing to do. After three hours of work with auger and chisel, in the reclining position enforced by three-foot headroom, I had a large pile of firewood ready for the galley and considerable stern planking exposed — but no gaping hole to plug. We drove oakum all around the sternpost and down the horn timbers. Two hours of prodigious labor and we emerged at two o'clock into the dazzling sunshine, proud as schoolboys of our success.

Now came a long succession of beautiful days, bringing most of the things I had always wanted to see and experience — flying fish (they really do fly), schools of porpoises, tropical clouds, and that complete detachment from the world that comes only after many days at sea, with no news, no radio, no passing ships. An occasional squall, presaged by a surpassingly ornate sky worthy of Homer, might vary the routine. The crew would don oilskins, ready for action should the disturbance be severe enough to require it. When the squall hit, the *Spinney* would heel over just so far and sail like a Cup boat, rail awash, the skipper at the helm nursing her along with a firm and practiced hand. The torrents of rain accompanying these squalls made a perfect shower bath (in which soap would lather!) and we always took advantage of the opportunity.

After a week of fair winds, we reached the Doldrums. Days of slatting and motor work netted about seven knots. We did not stream a log. Accustomed to judging speed by eye alone on his many long voyages, Sterling could estimate ours within half a knot. Sure enough, I found myself becoming accurate in the part of human speedometer. To test our estimates, I dropped a piece of paper off the bow, counting seconds until the helmsman signaled its arrival at the stern. I am sure we would be in the regions of the Doldrums still were it not for the Diesel, for that part of the world is the worst of the seven seas for sailing ships. Windjammers of old were becalmed there for months.

Every night a strict bow watch was kept even though we did not expect to see much of anything. A secret daily changed signal was laid out on deck for the air patrol to see, and a plane would appear out of nowhere, circle twice, and disappear.

Finally, on the evening of the fifteenth day, we sighted Cape Mala and in the succeeding dawn picked up a fine breeze for the sail up the Gulf of Panama. The passage through the Canal, thrilling as it is for the first time, was doubly so in wartime. I enjoyed a balcony seat in the fore crosstrees.

Though we may not speak of the Canal, of Cristobal we may speak, if of nothing else than the climate, the most atrocious I have experienced. It rains hard for a period every day and for the rest of the time it steams. An August scorcher in New York is equivalent to a cool evening there.

We were barely docked when Beverly Turner invited the skipper and me to the Cristobal Yacht Club where we were given the run of the place for the length of our stay. It was like a page out of Conrad to sit in a porch chair with a tall drink and listen to yarns about the endless stream of 'round the world navigators, their personalities, troubles and little ships. Turner, of course, deserves a paragraph himself; in his strategic station, not a ship could go through without his knowledge and he had made a hobby of meeting and playing host to all of them as well as vicariously taking part in their cruises.

He is an extremely likeable, soft-spoken chap, slight in build. I am sure many a single-hander has had his troubles ironed out by Turner. One of his yarns concerns a Polish yacht of about 35 feet, which had lost her keel just before reaching Curaçao. Her owner, penniless, showed ingenuity that is about tops. He got hauled out, did some scraping and painting and minor repairs, got his clearance papers in order and, during the night, slid off the ways — with a section of rail from a nearby railroad siding bolted on as a jury keel! He arrived in Cristobal about two weeks later, having lived on peanuts in every known culinary form. Turner's brother-in-law bought the yacht. The Dutch authorities in Curaçao do not know to this day what happened to their track system but they suspected sabotage.

We were docked in Cristobal next to the *La Plata*, an extremely dirty and unkempt little banana boat of about 80 feet. Later, I read in the New York papers of the part that she played in the big spy ring activities which were made public last summer. She had a powerful modern Diesel, and a two-way radio, under an appearance of something off the Jersey mudflats.

Another boat of interest was the *Bluejacket*, a salty little Casey-built 50-foot schooner whose owner, Bailey, just happened to be going through the Zone to the South Seas when war broke out. The Navy wanted the yacht for patrol work, so they took over, made him skipper, provide all maintenance and crew, and pay him $700 per month. Gentle reader, that's what I call the breaks! Anybody got a ketch they aren't using for a while?

As to the town of Colon, there is a picture never to be forgotten, a kaleidoscope of vice, dens, saloons, importuning "girls," blaring juke boxes and, just before crossing the tracks to Cristobal again, a clean, white, prophylactic station and the Y.M.C.A. Write home to mother and sweetheart, soldier!

As time for our departure on the northward leg drew near, I could detect a subtle change in the crew and in myself, too. Naval officers would come aboard and chat and make matter-of-fact references to our chances of getting through or say, in an off-hand manner, that "the subs sure were thick out there." Going to New Orleans they called "running the gauntlet."

The men went about their work, but with a manner of restraint, and they were silent more often than not. Bruce's guitar sang the blues at night instead of the usual stomps. You could see that there was anxiety in their eyes behind the attempts to laugh it off, and homesickness, an integral part of a Bahaman, was mixed with a silent wonder whether they would ever see their beloved Nassau again. I was reminded of the old story of the bear hunter who eagerly followed a grizzly's tracks all day while they got fresher and fresher

Jack Dixon

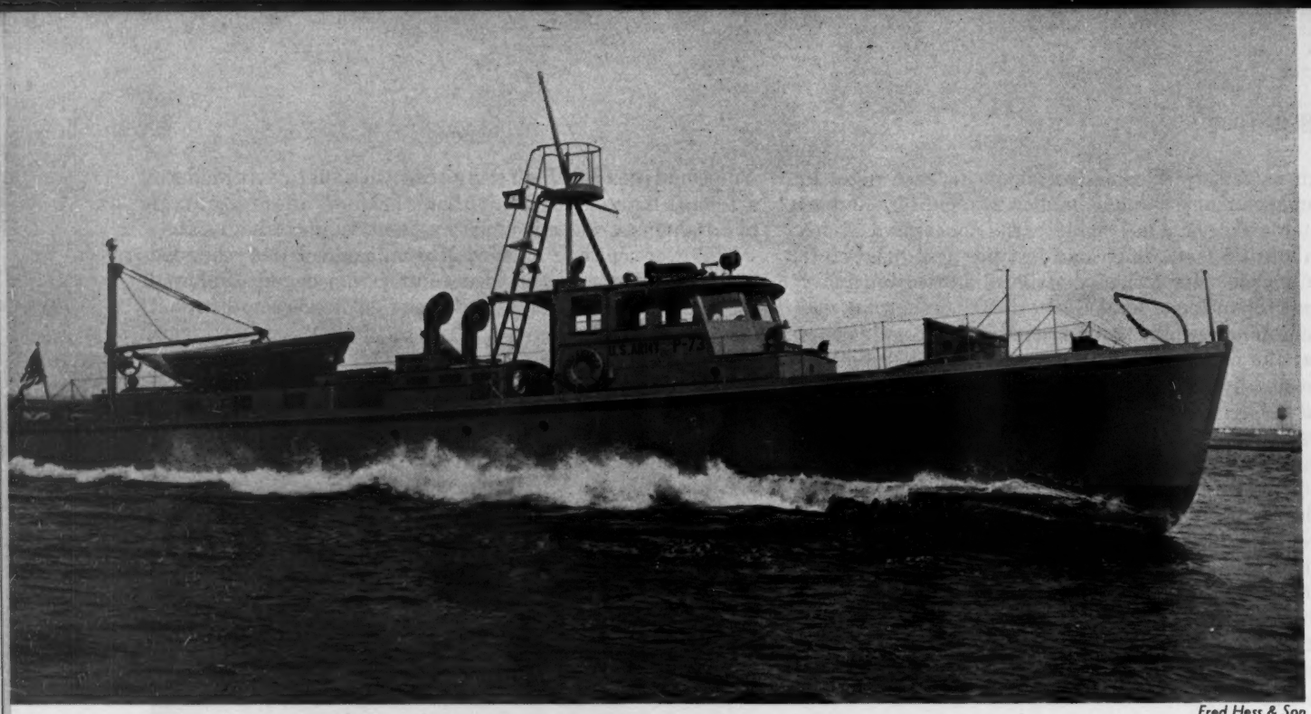
Sterling Hayden, master mariner, on the deck of his own vessel at last. Above, the skipper is a fine sailorman and handy at all sorts of seamanlike jobs

until finally they got too damned fresh and he decided to go home. Here, however, there was no turning back. You were part of a ship and the ship was being drawn North as inexorably as a compass needle.

I think the atmosphere of the town bred morbidity for, as soon as we were outside and watched the Isthmus fade under its low hanging blanket of cloud, our spirits rose and we breathed deeply of the clean sea air that was like a tonic after an illness.

There was no wind but we knew that we would pick it up after getting up into about 11° or 12° N Lat., and so it happened. Sterling gave the order to hoist the main. We went forward to start the deck engine, a large one-cylinder stationary of the old wood-sawing type. It decided

(Continued on page 77)



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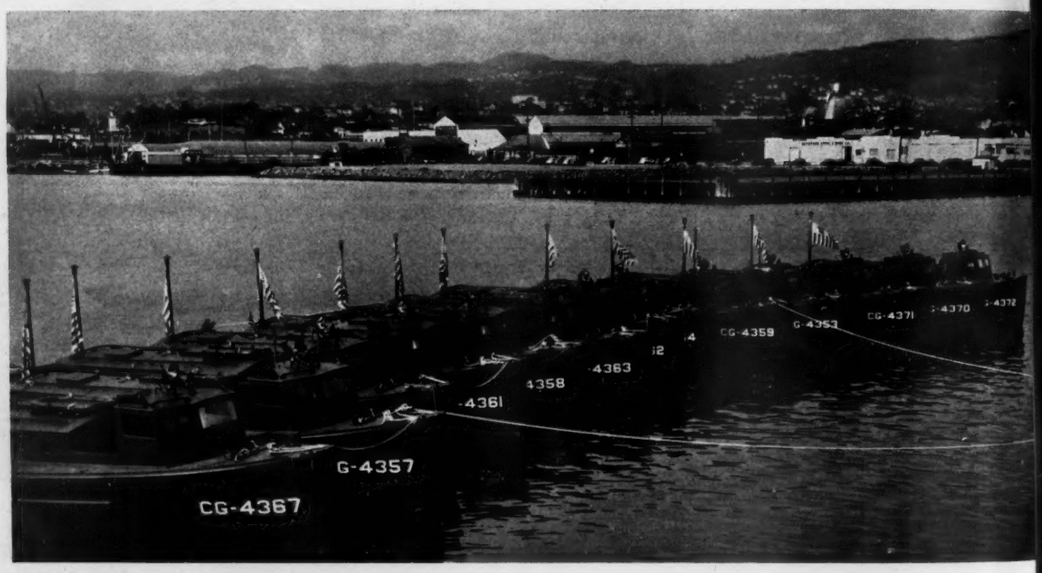
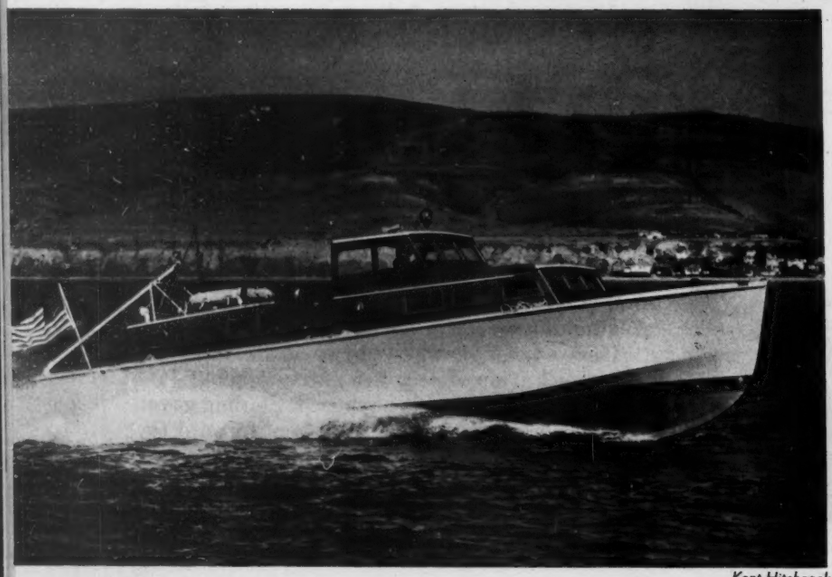
Fred Hess & Son

HALL-SCOTT POWERS MANY ARMY-NAVY CRAFT

2



(1) This businesslike 83' aircraft rescue boat for the Army was built by the Ventnor Boat Works, Inc. (2) The Coast Guard's famous 38' picket boat has done yeoman service in many waters. This fleet is from the yard of Stephens Bros. (3) Designed to get there in a hurry! A 45' aircraft rescue boat for the Navy, built by Hubbard's South Coast Co. (4) Dooley's Basin & Dry Dock Co. is the builder of this 104' Army aircraft rescue boat



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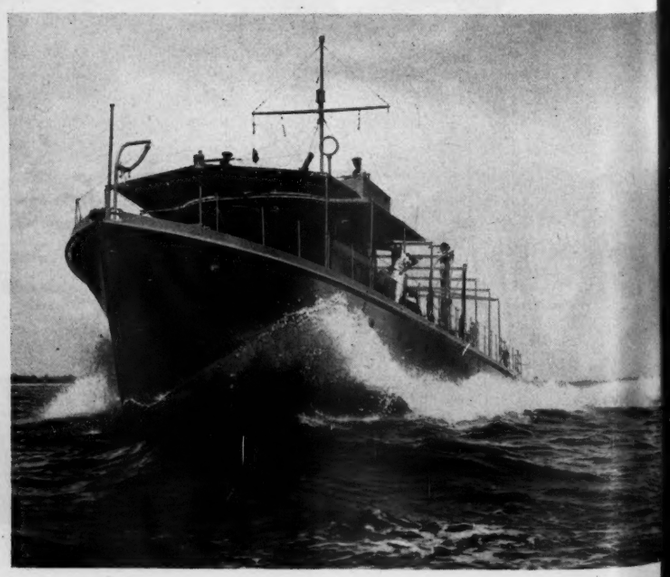
Kent Hitchcock



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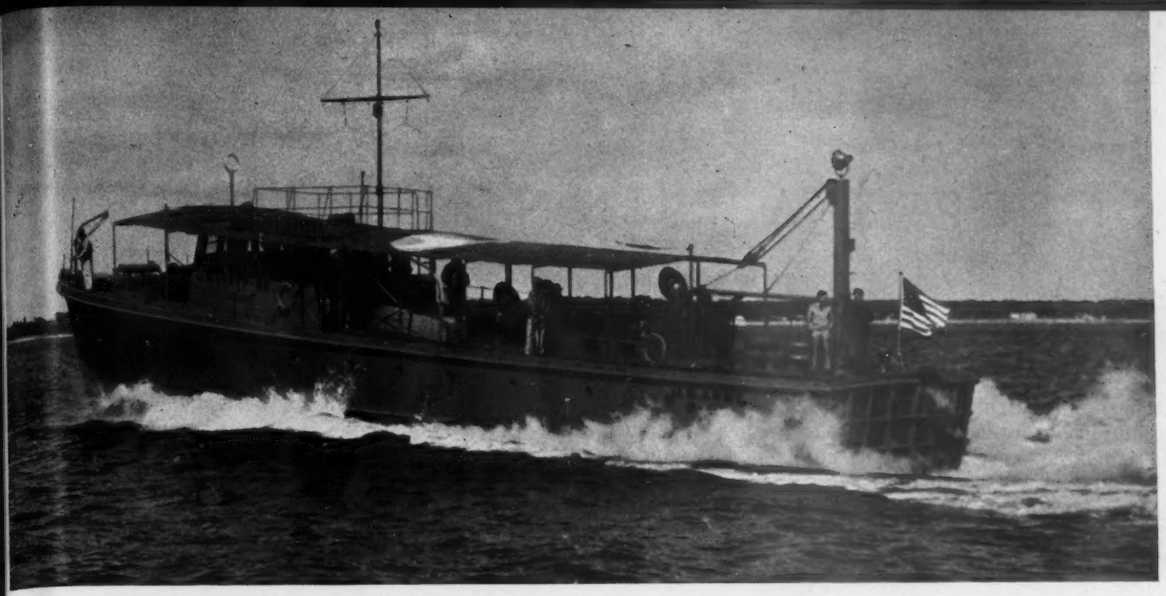

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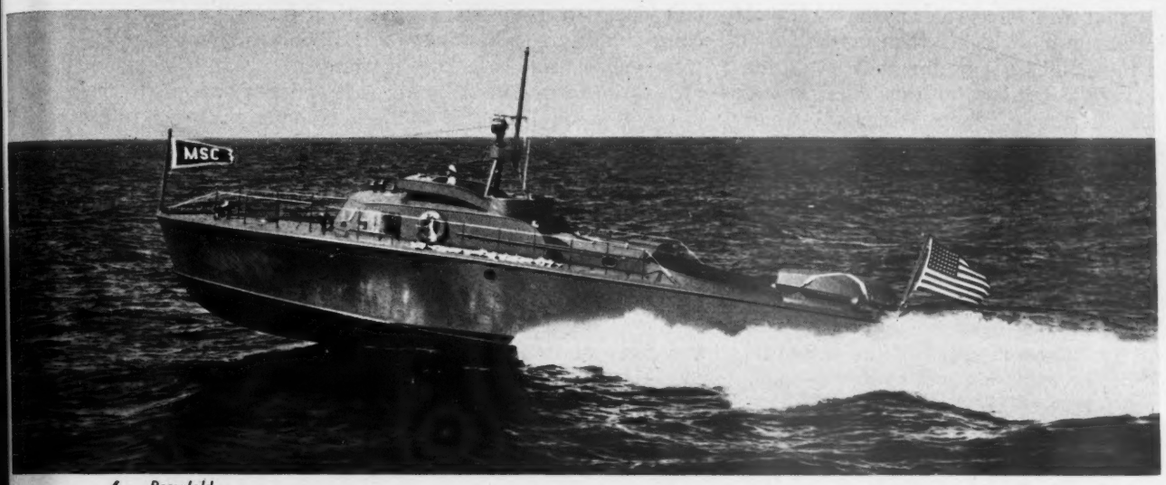


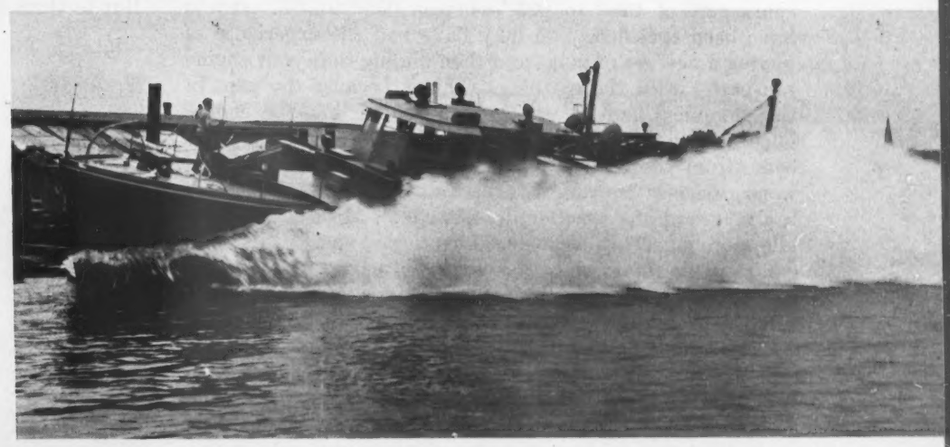
6 *Rosenfeld*

(5) Another view of the 104' Army aircraft rescue boat reveals many interesting features; note the U. S. aircraft insignia on the awning top. This one is from the yard of the Casey Boat Building Co. (6) The Miami Shipbuilding Corp. is the builder of this interesting craft. Sixty-three feet o.a. and having a family resemblance to the PT hull, she is designed for the Navy's aircraft rescue flotilla. (7) A sidewise launching on the East Coast. An 83' aircraft rescue boat for the Army, built by Cambridge Shipbuilders, Inc., starts her maiden voyage wih a mighty splash. (8) This highly efficient aircraft rescue boat for the Army is from Chris-Craft. She is 42' o.a. (9) One of the Royal Canadian Navy's famous "Fairmiles." She is designed for offshore anti-submarine duty.

7

The Hall-Scott Motor Car Co., veteran manufacturer of marine engines, is today equipping a wide variety of Army and Navy craft, and the excellence of its wartime record has been confirmed by the award of the coveted Army-Navy "E."

The Hall-Scott powered vessels here shown are representative of types constructed and equipped by many other builders and engine manufacturers.



9 *© Royal Canadian Navy*

8

KEEP 'EM RUNNING!

By TOM McCAHILL

Rough Idling

THERE are several common causes of rough idling in an otherwise normal engine. Perhaps the most common is an over-rich mixture. This usually results when the carburetor floods at idling speeds. The most likely reason for flooding is that the float level is not correctly set on the needle and that the seat is leaking, or there is an obstruction in the idling jet. Another cause, often overlooked, is an over-pressured fuel pump that will force the needle back and allow the fuel to rise in the bowl higher than normal.

Another factor in rough idling is timing that is too far advanced; there are several reasons for this. First is the position in which the distributor is set; this is the usual cause of advance timing but there are other factors that are frequently overlooked as they affect the timing to a slight degree only. But it is this slight difference that causes a lot of engines to roll, buck and stall. Distributor points set too wide may be responsible. In this case, the points will break several degrees before normal and cause rough idling since the piston will still be on the way up when the explosion occurs. At faster speeds, the engine may run fairly normally, since the increased speed of the piston in relation to the speed of the explosion will overcome some of this advance.

Another common cause of early timing is that the spark plugs are set too close. This has ruined the reputation of many an engine because the service manual called for spark gaps of .020″ to .025″ whereas .035″ to .040″ should have been specified. You may have had the experience of buying a new set of plugs and then finding that your engine ran better with the old plugs. This is because the gaps in the old plugs had spread through use so that the engine idled better than with the new ones. Today, most plugs come from the factory set at .025″ or less; this gap will work perfectly in some engines but in others this setting is a failure at any speed under 600 r.p.m. Most engines will idle more smoothly on a slightly retarded spark; this wide gap causes a retard since the spark will have to hesitate an instant to gather enough energy to jump a wide opening whereas if the gap were close it would just slip across without hesitation. This explanation may seem a bit untechnical but, this is what happens, nevertheless. That this does not hold true in all engines is due to the fact that some manufacturers have provided for enough automatic advance to cover all ranges and speeds. Consult your manual for the correct gap, and don't use a dime for the adjustment. Use a wire feeler.

If you have a speed boat or an engine that you run at high speeds most of the time, disregard the discussion above as it makes little difference how such a plant idles. The next time you board a transport plane, notice the jerkiness with which the engines seem to be running. You may expect one to land in your lap any second. But don't worry; they are set for higher speeds and, when the pilot opens the throttles, a smoother hum would be hard to find.

Other causes of rough idling are valves set too close. This is usually found in engines with overhead valves, as this type of engine lends itself more readily to tappet noises. To eliminate this noise, mechanics sometimes set the valves too close, causing lumps and bumps in the engine's performance. With this type of engine all tappet noises can, in most cases, be eliminated while maintaining the proper setting, if care is used. If not, let's have a little noise, which means nothing, and a smooth running engine.

Storing Batteries

Almost everyone knows that a battery kept in use will last longer than one stored on a shelf for a year or so. Of course, there are exceptions to this. If you store your battery with a dealer who is to keep it charged for you, it's a good idea to make sure that he keeps it charged but makes no use of it. With your pride and joy resting on his bench fully charged it is a temptation for the dealer to say "yes" when some truck needs a booster on a cold winter day, or the machine next door needs a good battery to turn over a freshly overhauled engine. This type of use is harmful and, in the spring, when you call for her, she may be just a mass of buckled plates, though her exterior appearance is normal. Be careful where you store your battery.

Another thought on batteries. Owners entering the Service may have no use for their batteries for some time. In this case, the best advice is to sell, as age, and age alone, is the biggest reaper of all batteries; a good battery of today may not be worth a hoot in two years even though it has not been used. This advice applies to boat owners not in the service but who plan to lay up their boats for the duration. But to them I should like to add a word of warning: What

(Continued on page 63)

Draining the crankcase preparatory to laying up the engine

Rosenfeld

George E. Noyes

The ship "Sarah Newman," a vessel of 899 tons, was built at Newburyport, Massachusetts, in 1857

THE LOG OF THE "SARAH NEWMAN"

From Materials in the Collection of the James N. Hill Marine Society, Phillips Exeter Academy

By JOHN BENDER

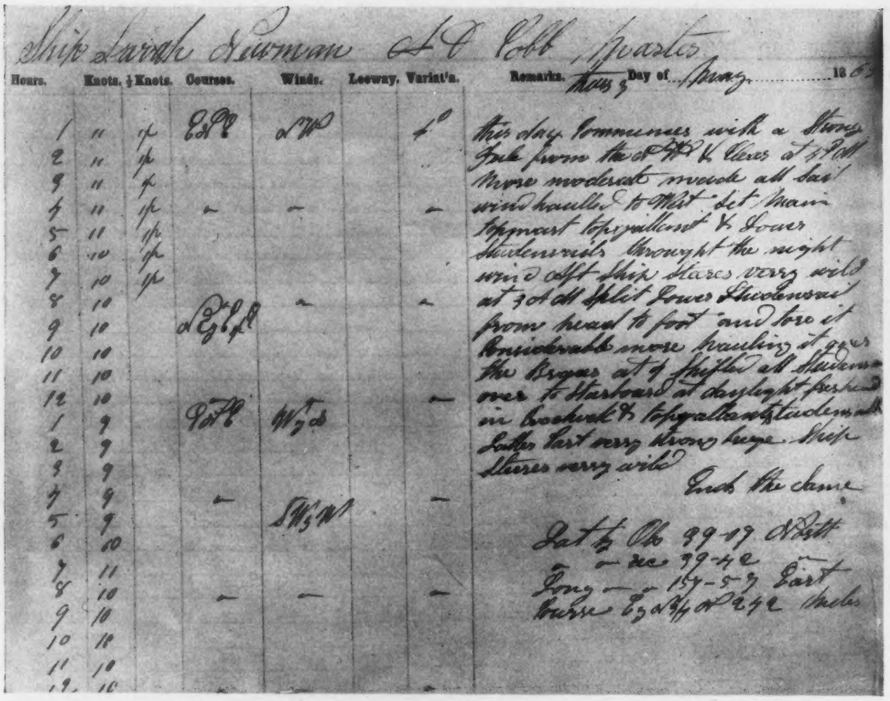
OUT of Newburyport, in the year 1853, sailed the crack packet ship *Dreadnought*. There are few sailors who have not heard of her and of her captain, Samuel Samuels. Under his command, she was one of America's fastest and most famous packets. Yet there is probably not one man in a thousand who has heard of the *Sarah Newman*, launched into the waters of the Merrimac less than four years later, from the same town. She was a less famous ship, yet a more typical ship.

There is always the danger that we, to whom the age of sail is more history than experience, should think of it as a series of discoveries, disasters, mutinies, battles, record runs, and such. We tend to see the history of sail as a series of dramatic incidents and neglect the more important, more constant events. All in all, a ship like the *Sarah Newman* was representative of the period, while the *Dreadnought* was, to say the least, exceptional. The premium on speed was not so important, for the emphasis had shifted to cargo capacity. Thus a transition had been made, say around 1856, from the extreme and medium clippers to the slower ships with larger carrying capacity for their size. It is for these reasons that the *Newman* is typical of her period and historically important.

She was built by John Currier, Jr., in 1857, and was registered in May of that year under the ownership of Charles Wills and the command of A. D. Cobb. Her principal dimensions were: 168′ 3″ by 34′ by 17′. Her tonnage is reported in the list of the American Bureau of Shipping as 899 tons. She was ship rigged, crossing four yards on her fore and mizzen masts, with five on her main. During the period of the log, however, she had no main skysail.

From the spring of 1862 until the middle of 1863, we have a record of the voyages of the *Sarah Newman* and of the men who sailed in her. From that record we can see much more than her stolid New England officers meant us to see. Despite their tight-lipped, phlegmatic character, they tell us a great deal about the ship, the men, the voyages, and even about themselves.

The log begins on a day late in June, 1862, with the *Newman* lying at anchor in Boston Harbor. Her first and second officers came on board, in time to supervise the


Ship Sarah Newman A. D. Cobb, Master

Hours.	Knots.	½ Knots.	Courses.	Winds.	Leeway.	Variat'n.	Remarks. Day of 18
1	11	½	E by S	W		4°	This day commences with a Strong
2	11	½					Gale from the W by N Clear at 4 P M
3	11	½					More moderate moored all Sail
4	11	½	–	–		–	wind hauled to West Set Main
5	11	½					Topmast Staysail & Lower
6	10	½					Studdensails Brought the night
7	10	½					wind off Ship Stears very wild
8	10		–	–		–	at 3 Set all Split Jaws Studdensail
9	10		E by S ½ S				from head to foot and tore it
10	10						Considerable more hauling it for
11	10						the Braces at 4 Shifted all Stairsail
12	10					–	over to Starboard at daylight Parted
1	9		W by S	W by S			in Bucket & Topgallant Studdensail
2	9						Lower Yard very heavy Large Sheet
3	9						Stears very wild
4	9		–			–	Ends the same
5	9			S W ½ W			
6	10						Lat by Obs 39-19 N Diff
7	11						– Lee 39-42
8	10		–	–		–	Long – 154-57 Dist
9	10						Course E by S ½ S 242 Miles
10	11						
11	10						
12	10						

A page from the log of the "Sarah Newman" as she stretched away across the Pacific from Hongkong. This day she reeled off 242 miles

loading of the last of her cargo, which totaled 1150½ tons of coal and 222 boxes of merchandise. Then the next two days were spent in that all important duty of getting all stores on board and stowed away. The crew came on board on Friday and was put to work the next day on the light task of drying sails. Finally, six days after the cargo had been loaded, the *Newman* was ready for sea. The log for this day, July 1st, reads: "at 4 A M turned out and hove the Chain Short and mast headded the topsails and got the Ship all ready to get under weigh at 11 A M the Captain and Pilot came on Board and got the Ship under weigh and Proceeded down the harbor towed by the Steamer Huron a fine breeze from NW at 12 the Steamer and Pilot left at Boston light made all sail and Proceeded to Sea the Ship being in Perfectly good order tight and Staunch and in evry way Sea Worthy."

At first the going was slow, for the winds off Cape Cod were light and baffling. After a couple of days, however, the weather settled down into a smoky southwester. Then, on the Fourth of July, the wind went around to the north, allowing Cobb to have port studdingsails set. Under these, the *Newman* ran at a bit better than seven knots for the day. The wind did not hold in that quarter, however, and she had to tack. Rain squalls were frequent, interspersed with sudden winds and calm spots. The poorest day's run was on the 23rd of July, when the ship made only 39 miles. On this day the monotony was relieved somewhat when the *Sarah Newman* spoke the bark *Maco*, of Philadelphia, bound for Pernambuco, Brazil, probably with a cargo of mixed merchandise and flour. In those war years and in those waters, it must have been quite exciting to sight a sail on the edge of the horizon, and to wonder whether it was a merchantman or a Southern raider.

The weather continued as before — rain squalls and light, shifting winds — until the end of July. Light sails were set and taken in, yards were braced to the variable breezes, and yet the *Newman* made poor time. On the last day of July, however, she ran into the first real storm. The wind blew up from the SW during the afternoon and, by sunset, the ship was tacking into a heavy sea. Under the strain, she began to work somewhat and to make water. The wind dropped on the fourth day of the blow, as the ship neared the equator. On August 6th, the *Newman* crossed the line. Although the equator is but the product of geographers' and astronomers' brains, it is as real to the sailor as a cape or a headland. There will always be a thrill to "Crossing the Line" but no hint of this is allowed to creep into the log. Once across, the *Newman* ran into bad weather again. The head sea picked up and the ship, beating into it, plunged heavily. Under the pressure of this windward work, first a jib and then a foretopsail blew out. There was a short respite when the vessel was eased off to pass in the lee of the Island of Fernandano (Fernando de Noronha), a penal colony lying NE of Pernambuco, but, once past the island, she was braced up to SW by S. As if a head sea were not enough, a bad cross sea now worked up. The *Newman*, a small vessel in comparison to merchantmen today, shipped a great deal of water. It was difficult enough to work on deck but it was a truly herculean task to bend another main topsail one night after the first one had blown out. Then, the next night, the maintopmast staysail blew out. It must have been a relief when the wind finally blew itself out, after a few parting squalls.

On the night of August 17th, it rained heavily, filling all water casks. In those days of long voyages and inadequate equipment, it was almost impossible to keep the water from turning stale, with a surface layer of animalculae, and it was a godsend to have rain water, fresh and pure, to fill up the casks.

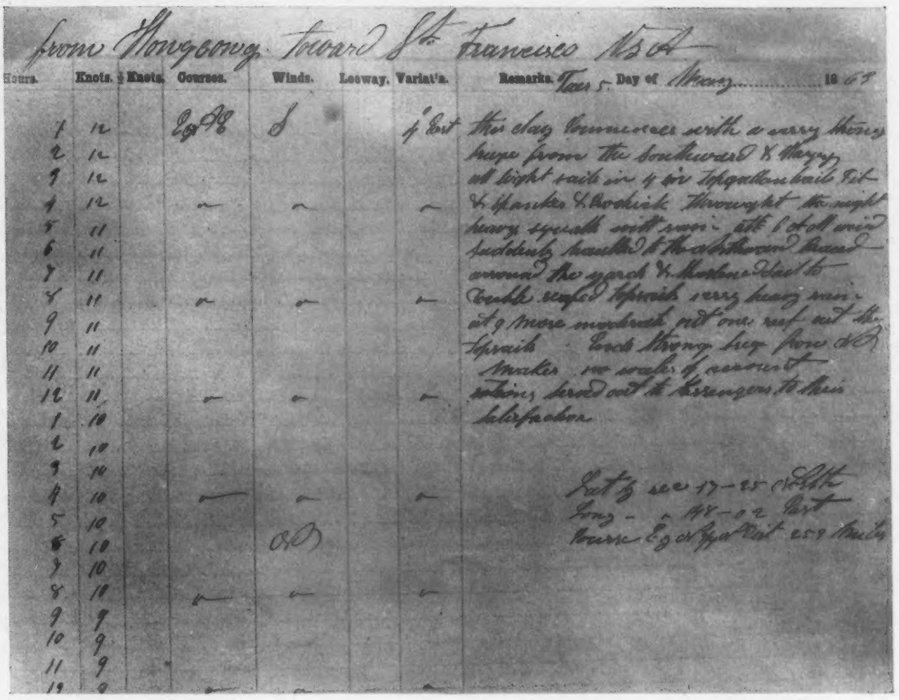
The *Newman* rounded the Cape of Good Hope in the kind of weather that is expected of the Cape. At first, it was merely squally, but the squalls settled down into a gale and a heavy sea kicked up. Then the wind dropped suddenly and, of course, the sea remained. In an effort to steady her down, all sails and starboard studdingsails were set. The ship continued to roll badly; gear began to chafe. A welcome relief came with a strong NW breeze, but this, too, was not all beer and skittles for, in the dog watch, the wind went SW suddenly. The ship was logging ten knots at the time, a heavy sea was running, and the shift in wind caught her completely aback. It is witness to the care of her builders and the work of her outfitters that she was not dismasted.

On September 14th, a large ship, bound for Madras, was in company. Cobb evidently had the usual weakness of captains, for he set his port studdingsails, took them in, set his starboard ones, took them in, and ended the day with the port ones set again. I imagine there was never a really good captain who could see another vessel sailing the same course and not try to make a race of it.

For the first time, a group of men were off duty, sick. It speaks well for the ship that up to this time no more than one or two men were sick at one time. In that age, the diet was none too healthy, the work extremely hard, and the quarters crowded and unsanitary. No doubt the change of climate added to the sick list. Only a little over nine weeks after crossing the equator, the ship was running into extremely

thick snow squalls. The *Newman* must have been a beautiful sight as she drove through the squalls under reefed topsails. She was rolling badly, her decks constantly awash, yet she was logging ten to eleven knots.

It was not until the *Newman* fell in with the Trades early in October, however, that she really started turning in consistently good day's runs. Her noon to noon runs averaged around 200 miles. On the hundredth day at sea, the chains were bent and the anchors were gotten on the bows. After that long at sea, this task must have been a pleasant one for the men, bringing as it did the promise of shore leave in the East.



from Hongkong toward St Francisco Cal

Hours.	Knots.	Knots.	Courses.	Winds.	Leeway.	Variat'n.	Remarks. Day of 18
1	12						
2	12						
3	12						
4	12						
5	11						
6	11						
7	11						
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Two days later, the ship ran 259 miles in the sea day which extended from noon to noon. Note that the heading says "toward" San Francisco, not "to"

On Friday, October 10th, with a strong SE breeze and smoky weather, the *Newman* entered the Straits of Sunda (between Java and Sumatra). She made little progress tacking into the Straits, in the face of thick weather, a heavy head sea, and outsetting current, and a rapidly failing wind. The next day the captain was able to arrange for fresh vegetables to be brought on board from Angier (Anjer). This was really most important for the vessel naturally had no refrigerator facilities and fresh vegetables were necessary to keep the men healthy. This problem of fresh food and fresh water has always plagued men at sea. It is only recently that modern equipment has solved the difficulties adequately. While on the subject of provisions, it might be noted from the record of supplies kept by the mate that a barrel of flour and a barrel of bread were broached at intervals of a bit better than three weeks, on the average. But let us return to the account of the passage through Sunda Straits and one of the most interesting incidents in the log.

Disaster loomed suddenly in the late afternoon of October 12th. To quote from the log: "at 5 P M took a Counter Current Setting rapidly toward the Strom Rock Current took us within 1½ Cables length [900 ft] of the Rock Current running about 12 knots Presented a most frightful Sene . . ." In the face of such a current, with light winds, a sailing vessel is all but helpless unless she can anchor. In this particular case, good luck played almost as important a part in the safety of the ship as good seamanship.

The crew may have been glad when they cleared the anchors but they had little reason for rejoicing. Next morning, the vessel anchored at Angier but no leave was granted. The captain went ashore to fetch off a doctor for two men who had been sick for a long time. The crew was employed scrubbing the outside of the ship, which had become foul. The next three days might as well have been spent ashore, for the wind remained light and the current unfavorable. Cobb, taking advantage of every shift and puff, got the ship under way, anchored and got under way again, keeping this up for nearly ten days, while fighting to get clear. Evidently the light weather was as hard on the rest of the shipping as on the *Newman*, for the ships in company, numbering as many as twenty-two at one time, were having difficulty making any distance over the bottom. One vessel caught by light baffling airs and a strong current drifted on the Brower Sands.

On the 20th, land was sighted ahead but the entrance to the Straits of Gaspar (Gasper) was not visible. Two days later, the *Newman* tackled the Straits of Mackensfield (Macclesfield). Both of these straits lie between Banka on the west and Billiton on the east, the two large islands at the northwest end of the Java Sea. Gasper Strait is on the east side, separated from Macclesfield Strait by the Island of Liat.

Sunda Straits had been tough, and the Straits of Macclesfield were not much easier. The *Newman* tacked into a light head wind, which dropped at nightfall. At daylight, a light breeze allowed the ship to trip her anchor with all sails set. It is interesting to note that the soundings made from the ship did not correspond with the chart. Once through the Straits, the *Newman* made poor time up the China Sea, with one period of twelve hours without headway. With a change in the month, from October to November, however, came a change in weather.

A heavy squall, followed by a strong breeze, forced the captain to shorten sail. During the night the *Newman* hove to, rather than risk approaching land under such unfavorable conditions. She got under way again next day with a fine westerly breeze. A constant lookout was kept and frequent soundings were made. On November 5th, she passed between the Louisa Reef and the Royal Charlotte Shoal, which lie about 200 miles to the west of the north end of Borneo. The breeze went around to the north, bringing heavy black clouds and rain squalls. At this time, the ship passed among large logs of driftwood in great quantity. By the 7th, she was off the north point of Borneo, to the south of the islands of Balibuck (Balabak) and Paliwan (Palawan), both in the Philippine group. Two days later, the ship ran into a calm spell, with daily runs of only 35, 17, 23, and 46 miles. Even during this calm, cautious Cobb had frequent soundings taken, often finding no bottom with a 125-fathom lead line.

The calm broke with rain, wind, and a heavy sea from the north. Soon, however, the wind went around to the south and all studdingsails were set. The crew was employed in

oiling the decks. Good sailing weather seldom lasts, however, and the ship ran into another calm, with a run of only 68 miles for 72 hours.

Evidently these spells of calm and sudden winds were telling on the men's nerves for a man was logged for the first time. The log reads: "John Roach is a very contrary and agrivating man and quarrelsome in the ship." We will hear more of Roach, for this reprimand was evidently not enough to discipline him.

This last calm spell broke with a northeast gale and a heavy sea. The wind was too much for the topgallants, splitting them, and even the topsails had to be double-reefed. The log for the 23rd reads: "Ship labors fearfully and ships great quantities of water on the decks at 2 Split fore and main topsail and blowed away the most of the foresail close reafed the topsails furled mainsail and bent new foresail Set it reefed. . . .Obliged to keep considerable sail on to keep her Steady as the Sea Comes from the Eastward." Three days later, a leak developed in the sternpost. As usual, the *Newman* was making water through her seams, which always opened under the pressure of wind and sea. Then, on December 2nd, the wind moderated, but there was a heavy tide rip. The Island of Formosa was sighted bearing NNE. On the 3rd, a strong breeze, a heavy cross sea and a strong westerly current battered the ship. This climate of gales and calms had strained the sails badly in the reef bands, so the officers were obliged to be careful of them.

The *Newman* won a race on the 6th when she passed the bark *Diadem*, out of Fuchu Fow for Shanghai. It was typical race week weather, with practically no wind. Two days later the wind petered out completely, the swell remained and the *Newman* slatted around for eighteen hours without headway.

Sailors are a superstitious bunch and the thirteenth of this month did nothing to allay their superstitions. In the morning: "a gale Came from the NNW Sudenly without warning Caught the Ship aback with all Sail on Carryed away fore topmast Studensail Boon and tore the Studensails to Peices Ship Soon filled away again all halyds let go. flying jib. main topgallant Staysail misen topmast staysail and misen topsail split to peices."

It was blowing a gale at the time, so it is little wonder that the much worn canvas let go. The gale continued from the NW for two more days, strengthening enough on the second day so that sail had to be further shortened. Land was sighted to port, with hourly soundings giving around 25 fathoms. Three ships were in sight ahead and it was probably these, plus the near proximity of land, which decided Cobb to heave to during that night.

A few days before, a curious entry was made in the log to the effect that the steward was careless, wasteful, negligent, impudent, and sulky. It is hardly surprising that, after some five months at sea, confined in a small ship and with the same men, some few should show the strain.

The 169th day at sea found the ship NE of the Saddle Island group, with Shanghai ahead. As she proceeded toward the mouth of the Yangtze, anchors were cleared for use. Then, at one o'clock of the afternoon of December 18th, the pilot came on board. That night they anchored near the lightship, with a "survilient watch" set. Nothing happened; they were not run down nor did pirates come on board, and they were able to sail up the river the next day.

For the next week, the operations of arranging to get the *Newman* up to the warehouses and to discharge her cargo occupy a prominent place in the log. The captain and the pilot went on ahead in a China boat, leaving the ship anchored in the river. The crew, naturally, spent the watches painting and cleaning up. Two days later, the pilot returned with the steam tug *Washington*, but there was not enough water for the *Newman* to cross the bar. The following day, she managed to get across without touching and anchored below the city. Then, the next day, she sailed up to her moorings off the American Hong (warehouses), arriving just in time for Christmas. In honor of the day, the ship was washed and all colors hoisted.

Despite freezing weather, the 26th was spent in unbending and stowing away all sails. The next day, most of the boxes of merchandise were unloaded and everything was made ready for discharging coal. The crew worked at this but most of the work was done by Chinese coolies. This was especially true since the men were sick on and off with diarrhea. Although nearly a month was spent in discharging cargo, the men had an interesting time. At one point the log reads: "Boy Frank was chained up to a Stantion for Continually making a Disturbance in the Ship quarreling with the men and impudent to the 2nd mate hee is a verry bad Boy." This seems like rather primitive punishment. The excitement of this had just about petered out when a vessel collided with the *Newman*, carrying away her bumkin, for which damages of $10.00 were recovered. Then, on the 19th of January, the men had their first shore liberty. They went ashore to find Shanghai buried under six inches of newly-fallen snow. The glamourous East must have looked more like their own New England. On board ship, the men were kept occupied taking in mud ballast, set on six inches of dunnage to keep the bilge water from dissolving the mud. It is noted in the log that the ship, with 300 tons of coal still aboard and 123 tons of mud ballast, drew 13′ 1″. This may have interested the officers, but the crew was more interested in the steward's latest act. That ingenious man had drilled holes through the galley deck to let water out between decks. Unfortunately for him, the holes were noticed and he was forced to plug them up again. Towards the end of the month, the men started cleaning and painting. Evidently this bored two of the hands, J. R. DeHaan and George Martin, for they deserted.

The preparations for sea are most interesting. The pumps were overhauled, the ballast trimmed, everything heavy was gotten below, and the water casks were filled. The sails were then bent, the bobstays set up, and the chains cleared. Then two seamen came on board for the run to Hong Kong, to take the place of the two deserters. The pilot came aboard and the tow boat *Martin White* stood by. What followed was both amusing and dangerous in the extreme. The language of the log is too good not to quote directly: "in heaving up the anchor I found the crew were intoxicated and began to use verry abbusive and agrivating language I was obliged to put up with them and tryed to avoid a quarrel as at that time it would have been fatal to the ship as the anchor was dragging and being Close in amongst the Shipping wee were likely to take foul of another Ships chain and Come in Colition or drag on Shore the men would leave the Brakes and go in the forecastle to drink this lasted only a short time an as soon as I Could get time *I the mate* had the forecastle Locked I soon Discovered the forecastle to be opened and upon examination found the lock had been broken and three men. Namely John Roach, Kelly and Scotty in there they are the drunkest and use the most disorderly and abusive Language the lock was not broken again and at night after the ship was brough too about 10 miles from Shanghi looked for the rum in the forecastle and they all gave their word that there was no more rum in there and promised to behave themselves I let them all go in and all appeared quiet but during the first Part of the night I saw John Roach prowling about the decks but as hee was quiet I said nothing to him I set a different watch from usual to avoid the drunken one keeping wach So Ends this day."

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HAULED FOR THE WINTER

Insurance Protects Your Vessel from the "Perils of the Sea," and It Pays To Consider the Hazards of the Shore

By RUTH BRINDZE

THERE she is, boys, hauled for the winter, snug as a bug in a rug under her canvas cover and safe from what the insurance companies generally describe as the "perils of the sea." The waves can't strike her, neither shoal water nor deep can trouble her, and there is scant likelihood of rigging going by the board even in the hardest blows. Statistically, the hazards of being on the beach are *de minimis* compared to those of being afloat; yacht insurance policies are written accordingly. During the six-month lay-up required by the average policy, the mishaps for which the insurer assumes liability are sharply reduced.

As things work out, the owner who exerts himself to leave his boat shipshape and Bristol fashion may be penalized for his trouble. It is recognized good practice to take everything out of the boat that can be carried out: mattresses, cushions, lines, anchors, and all the other gear needed for working the ship and for living comfortably in her. This end-of-the-season stevedoring is a tough job but it's for the good of the boat that she be stripped so that the winter winds can blow in and out. If she is a sailing boat, the stick may likewise be unstepped and inside ballast removed, again because it is better for the ship and the gear. But the owner may be the loser despite all his loving care for everything taken out of the ship and stored in lockers or at home is, under the standard form of policy, insured only against fire loss. If gear is stolen, lost or damaged; if the lockers are blown away or flooded; if the backbone of the dinghy is shattered, it's the owner, and not the insurance company, who has to pay. Such losses are clearly and explicitly excluded.

Yet if gear is left on board it is covered against the depredations of "assailing thieves" as well as against wind loss and fire. There doesn't seem to be much logic to it but that is the way things stand. However, before deciding to take your chances with mildew on the mattresses, dry rot in the hull, and wear and tear on rigging left standing, talk to your broker about endorsing the policy to broaden the scope of the insurance. There are several ways in which this can be done so that you can store gear apart from the boat and still be protected against theft and other loss.

Such additional insurance does not affect the clause in the policy fixing the company's maximum liability for fire loss on gear stored apart from the boat. The standard policy provides such a maximum and states that the insurance on the hull is reduced by the value of the gear stored separately (up to the stated maximum). As a general rule, this works fairly for both insured and insurer, provided the owner has performed some simple arithmetical computations to

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At top, fire in a yacht storage yard may bring up some interesting questions as to what is and what is not covered by your policy

Left, there's always a chance of personal injury when work is being done aloft

Rosenfeld Photos

UNDER THE LEE OF THE LONGBOAT

By "SPUN YARN"

NOW that it's gone, I give you October — and I offer it as a toast and not as a gesture of repudiation. In October of two years ago, when a few clothes covered the tanned hide of a cruising man, I found sailing in the Chesapeake as close to perfection as anything that I could conveniently recall. Now that I have the tanned face and bleached torso of a naval officer I reaffirm my devotion to the golden month. This time October began badly with a southerly gale that kept the patrol boats in and made the working mine sweepers as uncomfortable as you have imagined them. Head on to that gale came a cold front with accompanying norther that piled the leaping sea in the opposite direction. Then we swept in a northeaster and in a southwester and, in rapid succession, strong winds from other directions made life miserable. Seasick cooks and their substitutes found it difficult to keep food on the galley ranges and in the off watches were mumbled dire threats of transfer to battle wagons and heavy cruisers. . . . A week of that and the true October revealed itself. Overnight the sea smoothed. The sun rose in a cloudless sky and warmed the concluding whispers of an offshore breeze. As the sweepers took up their daily task, little land birds known to us non-ornithologists as wild canaries hovered gracefully around and lighted gratefully on board, took off hurriedly in an unrewarded search for land and returned to their providential sanctuary. A turtle, whose great size implied familiarity with all types of fighting ships from privateers to mine sweepers, submerged briefly as we passed by. Butterflies disregarded us and pursued their feckless way down wind ten, twenty, forty miles from the nearest meadow. Buoys, which sometimes retain their cherished invisibility until it's a matter of yards, stood up motionless on the far horizon. What a day for mine sweeping! . . . I wasn't the only one aboard who declared that it more than evened up for all the dirt we had been taking, who felt that, in the warmth of its sunlight and the coolness of its shadows, the richness of its memories, it is October's mission to condition us for the coming winter gales.

I take it I reveal no military secret if I comment on a phrase that appeared in Hanson Baldwin's description in the "New York Times" of a day spent in an escort vessel accompanying a coastwise convoy. . . . At the close of day, the vessel turned "eastward into the setting sun." I've been shipmates with a magnetic compass that showed northeast on a north heading and southeast on a south heading, but I happen to know that the PC in which Mr. Baldwin made his trip is fitted with a gyro compass. I judge, therefore, that a wily censor substituted "eastward" for "westward" in order to confuse the enemy.

Before leaving the perennially fascinating subject of newspaper boners, let me tender thanks to the correspondent who sent a clipping from the "St. Louis Star-Times." It shows a picture of the *Joseph Conrad*, and identifies her as "the famous old square-rigged racing schooner." It seems that this vessel plays an important part teaching the sailors of the "Coast Guard Merchant Marine," and that in the picture men furl her "giant sails" and "scramble monkey-wise over the complicated rigging." It's all too complicated for me.

I'm a month late in extending congratulations to Bob Rimington and YACHTING on their happy union. Bob was signed on to take some of the editorial load off the Old Man's shoulders, and that has hitherto been a job for three ordinary men. One catches the Editor, the second holds him down, and the third, if he is strong and spry, takes the load off his shoulders. . . . While concerned with these family matters, let me call your attention to the fine bold work that Darrell McClure is doing. His cartoon on "Telltale's" page in the October number was by all odds the best thing I've seen in my rival's department in many months. Some, looking at Mac's drawing on page 42 of the same number, have dubbed him the second Hogarth. I have on my walls at home a couple of early McClures containing caricatures of me that I'm going to hold until the artist's riches and fame march in step with his merit. Then I'm going to sue him for criminal libel.

A story going the rounds concerns a lieutenant commander recently inducted into the Naval Reserve whose name, let us say, is an unusual one like Carroll Emery Witherspoon. He received orders assigning him to command of a PC boat in Boston and, on reporting aboard in his brand new uniform, was considerably relieved to learn that his executive officer was well acquainted with the vessel. Because, if you care to believe the yarn, the new C.O. knew one end of a boat from the other but was unencumbered by

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Frank J. Clark

The bow-steering ice boat, with her cat rig, has proved remarkably fast, particularly in the small size

ICE BOATS

The Small Modern Racer is Faster Than the Huge Old-Timers of the Hudson River Type. Why is This?

By

RAY RUGE

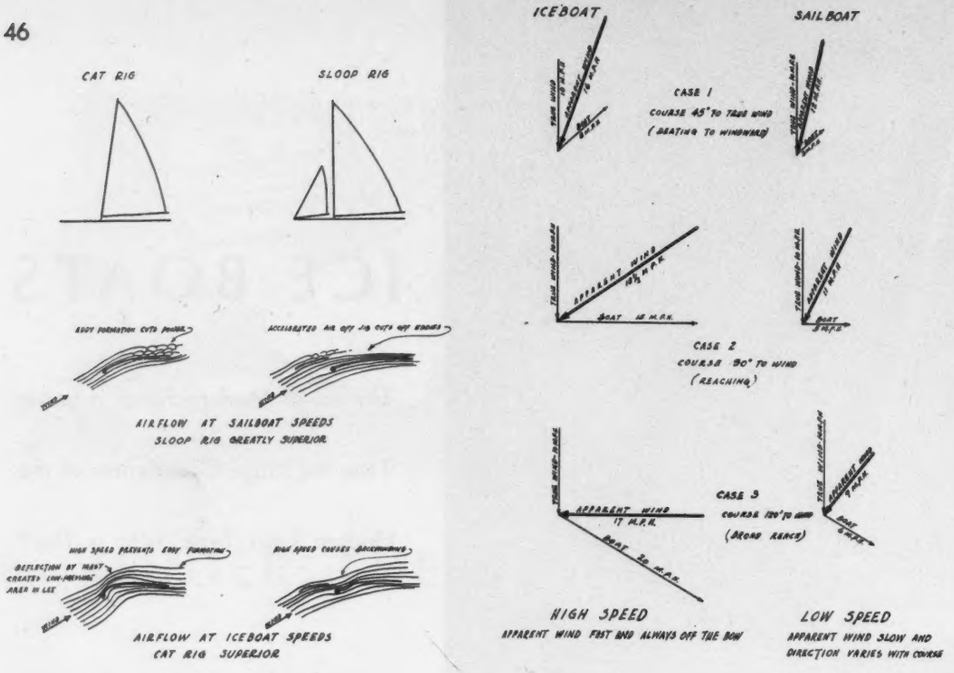
EVERY ice boater spends the entire summer and all his free hours during the winter "talking ice boats" with anybody who will listen, telling pardonable whoppers, and offering his own pet theory as to why the *Flub-Dub* or Joe Zilch's *Whatzis* is the fastest thing on earth. After hundreds of such happy hours, I have begun to notice that there is a tendency on the part of amateurs and professionals alike to complicate the issue tremendously, and to surround the design of successful boats with a shroud of mystery and metaphysics. I would like to open this discussion in true amateur fashion by stating flatly that the ice boat is a ridiculously simple affair, and that, in nine races out of ten, the only significant difference between the first boat and the last is either better runners, better sails, better controls or, most common of all, a better skipper.

I would add that excellence in all these four essentials is relatively easy to attain — with the possible exception of excellence in the matter of sails. Sailmaking is a fine art, and ice boat sailmaking is a specialty within that art. Nevertheless, an understanding of what a sail really is, and of how it works, will enable you to do wonders for the sail you have without having to dent the budget for a new one. One of the grand things about any kind of sailing is that the ability to write fat checks never made a sailor, and the wise old horny-handed boys who build their own and patch their sails can still bring 'em home in front — because they know what makes 'em tick.

To start with the broadest of generalities, every ice boat is essentially a framework mounted on runners and propelled by sails. Her speed, unhampered by any appreciable resistance, is more like that of a small airplane than that of a sail boat. Hence, it is reasonable to suspect that there is more food for thought in the airplane field than in that of the sail boat when we get into matters of design. As a point of beginning, the only possible motive power is that produced by the rig, and it seems logical, therefore, to turn our attention first to this power plant, to see what conclusions may be drawn about it, and then to see where these may lead us in designing the rest of the boat.

One of the most completely misunderstood phenomena of all ice boat history was the marked superiority of the cat-rigged bow-steering boats of the early 1930's to the finely-tuned and apparently unbeatable sloop-rigged stern-steerers that had ruled the roost until that date. Like Young Lochinvar, these new flyers "came out of the West" (in this case, Wisconsin), spreading consternation in their wake. As to their incredible speed — particularly to windward — there could be no doubt. As to the reason for this speed, opinions were as varied and as numerous as their proponents, and every ice boater took a shot at explaining.

By and large, the general conclusion ran pretty close to the most obvious one: that, somehow or other, the reversed hull, with rudder forward and runner plank aft, was the key to the situation. Pinned down to paper and pencil, some of these theories were a bit weird. Here and there amid the tumult and the shouting was heard a still, small voice saying: "Forget about the d— bow rudder for a while and take a good, long look at the *rig*." These folks remembered that though the Europeans had been first to adopt Dr. Curry's overlapping jib theory for sail boats, they had also long since *abandoned* the jib for ice boats. They insisted that the secret of the new boats' amazing speed lay in their modern, efficient and powerful rigs. They pointed out that tiny little sails of only 75 square feet area on these boats were generating enough power to carry two men as well as the boat at speeds far above those of the older and far bigger boats. They also pointed out that heretofore no boat with less than 125 square feet of sail had ever been more than an



impractical toy, with no performance rating whatsoever. That this raised a storm of dissension is putting it mildly, for not only did these newcomers run rings around us and make us feel distinctly old-fashioned and helpless, but they all sported that shameless, unscientific, anti-Curry affair, the cat rig!

Every real sailor knows the theory of the overlapping jib and the reasons for the superiority of the jib and mainsail rig to the cat of equal area, in sail boats. For review purposes, however, let it be said that this analysis shows how the air caught by the jib is directed aft with increased velocity as it is squeezed through the narrow slot between the jib and the lee side of the mainsail, where it serves to cut off a set of harmful and power-killing eddy currents that try to form there. This "Slot Effect," increasing the speed of the air off the jib and destroying the eddies, greatly improves the partial vacuum in the lee of the mainsail, and thereby markedly increases the power of the rig. First propounded by Dr. Manfred Curry, this theory has, in a dozen years, revolutionized sail boat rigs and handling. Where, then, is the catch? Why does the cat rig, proved by Curry to be 30 to 40 per cent less powerful than the sloop of equal area, seem to be *more* powerful on an ice boat?

The answer lies, of course, in the one great difference — all remarks about temperature being out of order here — between sail boats and ice boats, namely, speed. Because she enjoys almost complete freedom of motion, the ice boat can do what every sail boat would do if only she could get up out of the water and shake herself free of its terrific drag. The occasional bursts of speed made by Inland Lake scows when choppy water enables them to "plane" and get up out of it for a moment, are no surprise to an ice boater. If he is aboard, his one reaction is most apt to be: "What a shame that she can't keep it up!" On the ice, she can — and does — keep it up, with most interesting results. An ice boat traveling due east in a north wind of, say, 10 m.p.h., can easily attain a speed of 10 m.p.h., due east. As every sailor knows, strange things will have happened to the current of air that strikes her sail for, when she attains a speed of exactly 10 m.p.h., this air current will have a velocity of 14.14 m.p.h., and its direction will have shifted four whole points into northeast! The true wind, of course, continues to loaf along at 10 m.p.h. from the north. With this new air current, our skipper will have to trim his sail a bit to keep from luffing and, if his is a good boat, with a well-shaped sail, her speed will continue to increase. The probable limit of increase is reached somewhere about 20 m.p.h., boat-over-ice speed, keeping the course always due east. When this point is reached, the air current striking the rig will have further altered its speed and direction to 22.36 m.p.h. at approximately 2½ points off the port bow. This is cutting it pretty fine, and it actually represents about the best that can be done by holding the course exactly at due east. But that increase of air current velocity from the original 10-mile north wind to the final 22-mile air current is really "something."

We are getting close to the solution of a lot of the so-called mysteries about ice boats, including the famous business of "sailing faster than the wind" so popular with the press. This fascinating question belongs logically in a later article, on the technique of sailing. Let us here continue to delve into the problem of designing a proper rig for our ice boat in the light of the *fast, off-the-bow,* air current that seems to be what she normally has to work with. The harmful eddies in the lee of the mainsail, so cleverly cut off by the air stream from a sail boat's jib at a speed of 10 to 12 m.p.h. at best, *never get a chance to form* when we step things up to 20-30-40-what have you? And so the basic reason for carrying a jib, to step up the power of the mainsail, is literally "gone with the wind."

J.L.JOVA'S "VIXEN" - CLASS A
ORANGE LAKE ICE YACHT CLUB
DESIGNED AND BUILT 1882 BY CHAS. & WM. MERRITT OF CHELSEA-ON-HUDSON
A SUCCESSFUL EARLY ATTEMPT TO ELIMINATE "JIB TROUBLE"

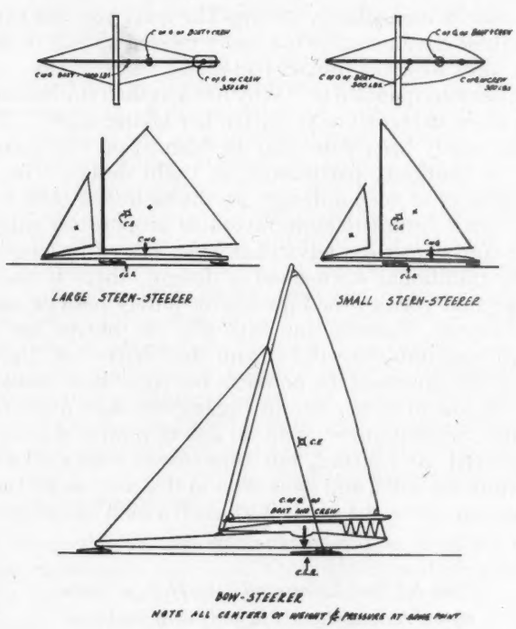
Not needed to boost the mainsail, what other purpose could the jib fulfill that made ice boaters cling to it so persistently and so long? "Why, to balance the rig!" say our nautical friends, and our ice boaters, also. (A balanced rig is one whose Center of Effort with all sails properly drawing lies in proper relation to the Center of Lateral Resistance of the boat so that the tendency to head up or bear off is at a minimum, and she tends to run in a straight line without help of rudder.) Obviously, this designed C.E. will not be attained unless the jib and mainsail are working in perfect harmony; with even the finest water yachts, minor adjustments of jib and main sheets must be made before the point at which she "sails herself" is reached.

On the water, where courses are held for several minutes, often an hour, and even at times for a stretch of several hours, this fine balance can and should be found. But on the ice, the whole situation is different. Courses are seldom held for more than a few seconds; wind direction and velocity are constantly shifting. There is no time for delicate sheet trimming. With a one-sail rig, it is possible, by hard work and a quick hand, to keep all the canvas constantly drawing. But with a sloop rig, the wind in the jib is going to do just one of three possible things: (a) help to drive the boat; (b) backwind the mainsail because trimmed too flat (killing the drive in the big sail); (c) luff because not trimmed flat enough, upsetting the air flow to the mainsail and surely

doing nothing to increase progress. With a flat-cut mainsail, a tiny "postage stamp" jib, and a miracle man on the jib sheet, you may get (a). With anything else, you will get (b) and (c) by turns, and the cat-rigged boys will be licking the tar out of you.

It is interesting to note here that the generally unsatisfactory behavior of ice boat jibs was well known to the pioneers of the sport along the Hudson River in the seventies and eighties of the last century. They tried the cat rig, complete with enormous mast and heavy gaff, all stepped on the backbone, well forward of the runner plank so as to bring the C.E. up by the main runners and away from the rudder. The results are not hard to imagine: One after another of these juggernauts took a quick run to windward, all very fine, turned gracefully around the weather mark, caught the breeze from the quarter, lifted her rear end off the ice and went berserk. The final wind up was sometimes a quick spin in mid-river, with the crew sliding off gaily over the ice. But more often than not it was a sickening crash as the whole works tried vainly to rearrange the solid rock ballast of the Hudson River Railroad.

Such behavior was apt to be a bit discouraging, even to those hardy souls, and they set about seeking other and more manageable solutions. In the early 1880's, Charles and William Merritt, of the little village of Chelsea, on the Hudson River, designed and built the first successful lateen-rigged ice boat. Her single sail, triangular in shape, was bent to two long slender spars, called "boom" and "gaff," respectively, from their relative positions when hoisted. These spars were shackled together at the forward lower corner of the sail, but the boom was attached to the nose of the short backbone *several feet abaft* this point. The sail was hoisted between the two "legs" or "shear poles" of an "A" frame which was stepped on the runner plank, about 5 feet each side of the backbone. At the apex, a small tackle under the joint permitted hoisting the sail, and a bridle-fitting on the very top of the apex joint took the wire bridle on which the sail really hung once it was hoisted. This "A" frame raked forward so that its apex was directly over the nose of the backbone of the boat and the sail, therefore, was hung at two points, directly above one another, permitting it to swing easily. Furthermore, because part of its area was *ahead* of this line of support, it was partially counterbalanced and could be trimmed with far less power than would otherwise have been necessary. The C.E. was well forward, away from the rudder, and yet there was no heavy mast out on the nose of the boat to overbalance her and lift the rudder off the ice — the bugbear of the cat rigs of that day. Results were as they should have been — highly successful. After one season of scaring the daylights out of far bigger sloop-rigged boats, she was bought by Commodore John E. Roosevelt, uncle of President Roosevelt, and one of the greatest of all ice boat fans. He named her *Eugene* and for many years she sailed with the Hyde Park fleet. Later, she was sold and renamed *Vixen*, under which rakish title she still races regularly as the flagship of the Orange Lake Ice Yacht Club.



I mention this boat in detail because many features of her design show a remarkable understanding of sails and rigs and ice boats. The fact that she is still giving a good account of herself, even with her long, low rig, shows the value of getting all your sail area in one piece. Other lateens followed immediately but the sloop rig was still in favor with the famous builder and designer, Jacob Buckhout, of Poughkeepsie, who, with his son George, built most of this country's successful ice yachts until quite recent years. The Buckhouts turned the ice boat into the ice yacht, refined and perfected their basic sloop-rigged design until their products completely swept the field. In so doing, they swept the lateen rig, which had benefited from no such refinement, into the discard. Had the Buckhouts worked on either the cat or the lateen with similar persistence, they would, without a doubt, have arrived at the highly successful cat-rigged type now almost universal in Europe; an extremely light, hollow mast and Marconi rig to cut down nose-weight, and an exceptionally long backbone, extending several feet abaft the main boom, to keep the rudder on the ice and minimize spinning. But they stuck to the sloop, which thereafter remained the accepted rig until that fatal day when some "crazy Westerner" stuck a cat rig onto a reverse-English hull that steered from the front like Sister Susie's tricycle — and, *zowie!* the apple cart was not only upside down — it was demolished.

To say that the cat rig alone was the cause of this disaster would be to over-simplify and to overlook other factors in the design of these boats, such as their streamlined and pivoting masts, streamlined fuselage-type backbones, sitting-up driving position, simple and workable sheet rig and, of course, the fact that the rudder was out in front. These elements all helped their speed, but the point I wish to emphasize here is that, basically, these are subordinate to and have resulted from the use of the cat rig. I sailed one informal race against a little Western cat-rigged boat with a pretty good sloop-rigger and got such a terrific beating that I could not escape the conclusion that here was something radically better. Having been trained as an architect, I was able to measure up the hull and rig of these new boats and draw them to scale, so that I could really give them some study.

The result of the study was a new boat, bow-steering and cat-rigged, which has been more than successful — but it took me one whole season to learn how to set her up properly, and the best part of another really to learn how to sail her. I hope in this and the following articles to set down what she has taught me. The first and most general conclusion I have been able to draw is that *the rig has more than anything else to do with the results.* This past season this same boat received a neat and complete licking from a stern-steerer of the same sail area, contrary to all the predictions of those who insist that a bow-steerer is naturally the faster type. As you have suspected by now, this new stern-steerer had a beautiful *cat rig.* And she was about the fastest thing on the ice at this year's Eastern Association Championships

— until the breeze got too big for her wire halliard and it came adrift.

This boat was particularly fast early in the day, before the wind got too strong. When it breezed up to the point where hiking was the rule rather than the exception, she began to have some difficulty, and the bow-steerers would overtake her rapidly. Unfortunately, she suffered a breakdown but there was sufficient evidence before it occurred to make a second general conclusion possible: *With equally efficient rigs, the bow steering boat will have a definite advantage over the stern-steerer when the wind gets strong enough to make hiking unavoidable.* Notice that I say "unavoidable" rather than "possible." There are many who feel that hiking, aside from being fun, is desirable for speed with a bow-steering boat. (All agree that it hinders rather than helps when the boat is stern-steered.) After several seasons of racing in a bow-steerer so much heavier than her competitors that she stayed down when they hiked, I have come to the conclusion that hiking may help a little, but extremely little; the major fact is that it does not *hurt* particularly, and that a bow- and a stern-steerer running neck and neck will be widely separated by the first puff heavy enough to hike them — with the bow-steerer far ahead when they have both settled down again.

This has happened so often and so consistently that there must be some fundamental cause for it. A little thought on what actually happens when a boat hikes will point to the answer. When either type lifts her weather runner from the ice, she lifts as if hinged to the ice on a line from her lee runner to her rudder — a line not parallel to the backbone but making a considerable angle with it. This angle is called the "Hiking Angle," and is one of the basic factors to be considered in ice boat design. An exaggerated case will make the matter clear; suppose a backbone measuring 15 feet from rudder to runner plank is mounted on a runner plank 30 feet long, projecting 15 feet on each side. Obviously, such an over-wide boat will hike on a line at 45° to her backbone, and in doing so will shift her C.G. sidewise to a marked degree. She will also shift the C.E. of her sail (forward in a bow-steerer, aft in a stern-steerer), also to a marked degree.

Elon Jessup

Now suppose the same 30-foot runner plank carries an over-long backbone, with a wheelbase of 45 feet. This time the hiking angle is only about 18°, and when the boat hikes, both Center of Gravity and Center of Effort shift far less from their original positions. It is not hard to realize that the boat doing the less shifting of these fundamental centers of weight and pressure will be the easier boat to control, and potentially the faster boat. For proof of this, we need only to note the results of steadily improved design in the 75-square-foot or "Skeeter" class. First built with a wheelbase of about 12 to 13 feet and a runner plank of 12, hiking-angle 26° 34′, these boats have progressed steadily through 16:13, 18:14, 20:14 until they are now being built with 22- and 23-foot backbones, (wheelbase 20,) and 14- to 15-foot runner planks — hiking angle around 16°. Where the little ones used to "rear" up on their noses, the 20-foot wheelbase jobs gracefully "roll" sidewise when they hike, and their speed is undiminished. This development took place in a class which is intensively competitive. Similar competitive activity in other classes would have produced the same result, but the building of a $2000 to $5000 yacht is not undertaken as often or in the same spirit of experiment as that of a $200 to $400 boat. The fact that most bow-steering designs have been in the small, less expensive classes, has resulted in their development and use of the smaller hiking-angle while the stern-steerer has stuck to the older rule of "1 to 1" (wheelbase: runner plank) which gives her a hiking angle of 26° 34′.

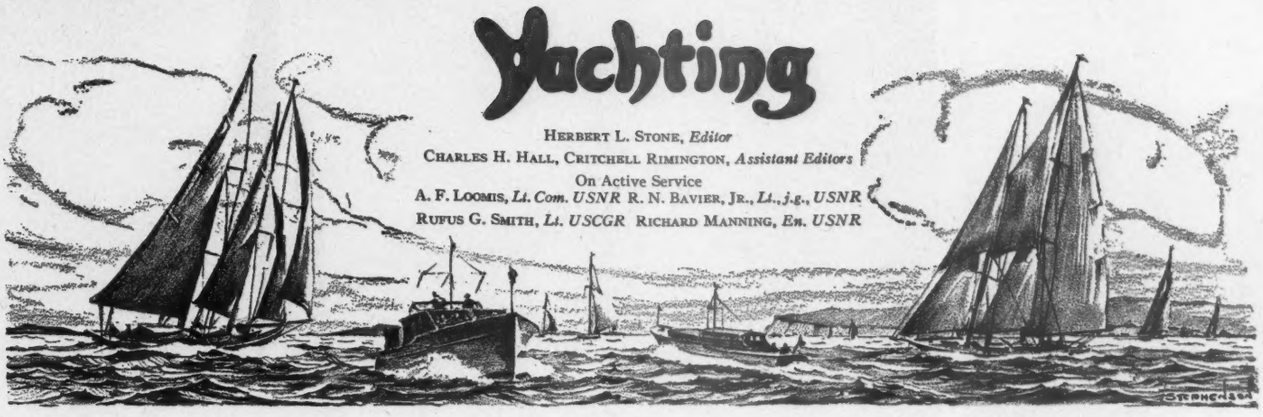
She therefore has been traditionally built with a hull which forces her to "rear" back on her haunches at this 26° angle every time her weather runner lifts. The least harmful result of such behavior is the shifting of her Center of Gravity to leeward, hence loss of righting moment and increased danger of upsetting, with obvious loss of speed as well as dignity. The most harmful and most usual result is that her Center of Effort shifts *aft*, toward the rudder, puts sidewise pressure on this steering-runner, and causes a sudden and extremely undignified manœuver known to the trade as a "flicker," and to the uninitiated as a "spin." "Spin" or "flicker," it's all the same, and it never won any boat races. Furthermore, it is *not* recommended when another boat is immediately astern. The least you can expect under these circumstances is a badly messed up pair of boats — the most involves broken bones and real trouble.

The obvious question is: "Why not lengthen the backbone of the stern-steerer so as to flatten her hiking angle?" That this has rarely been done may be blamed on the amazing power of tradition, particularly in yacht design. The few stern-steerers of such a design are the fastest of their type.

But, aside from the more favorable proportions enjoyed by the bow-steerer (an advantage easily erased by lengthening the traditional stern-steering design), there is one advantage that goes to the bow-steerer purely because she is a bow-steerer. Because she lifts aft, she moves her sail forward, and into the wind stream that drives her. By this very act she increases the power of her rig *at least enough* to offset the loss of power due to tipping her mast away from the wind, possibly more; with no loss of power, there is no loss in speed. By contrast, the stern-steerer rears backward, away from the wind, and loses drive in that way as well as by tipping away from the wind. With such a dual loss of power,

(Continued on page 69)

"Elja II," from Greenwood Lake, N. Y., is a cat-rigged stern-steerer with a fairly long backbone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EDITORIAL

The Coast Guard Expands

A RECENT issue of *The Coast Guard Bulletin* gives proof of the unprecedented activity and expansion which has characterized that service's contribution to the nation's war effort. Since November 1st, 1941, the entire Coast Guard has been operating under the direction of the Secretary of the Navy with the Commandant, Vice Admiral R. R. Waesche, continuing to administer the service under the Chief of Naval Operations.

The more outstanding of the past year's activities include:

> An increase in the number of authorized enlisted men and officers in the service; the development of a 90-day training course for Reserve Officers at the Coast Guard Academy; enlargement of the corps of regular cadets at the Academy; increased responsibilities of the captains of the ports, especially in the port security work; the commissioning of many new recruit training stations; the consolidation of the activities of the former Bureau of Marine Inspection and Navigation with the Coast Guard; a substantial increase in the Coast Guard fleet as a result of the greatest shipbuilding program in service history, and the acquisition of many small but serviceable craft from private owners.
>
> The shipbuilding program has been stepped up to meet the increased Coast Guard duties and to offset a depletion in the number of large cutters caused by transfers and assignments of these cutters to other services and duties. Many of the larger Coast Guard cutters are now engaged side by side with the regular Navy vessels in convoy and patrol duties. As replacements for the ten large cutters which were transferred to Great Britain under the terms of the Lend-Lease Act, before our entry into the war, the service has awarded contracts for a fleet of new cruising cutters 255 feet in length. In addition to these large cutters, hundreds of small patrol craft are now being constructed in shipyards throughout the country. Many of the larger types of these patrol craft will be used in anti-submarine activities along our coasts. Boats of this type already in service are performing excellent work in combating the submarine menace.

In meeting all the demands which this extended program has made upon the Coast Guard, this seafaring branch of the nation's armed services is once more living up to its motto, *Semper paratus*, Always Ready.

The Youngsters Must Carry On

THAT article of Rod Williams' in the October issue of YACHTING on the lack of any junior competitive racing last summer has stirred up a lot of comment and considerable argument as to who was responsible for the failure to carry on in junior activity. A letter in this issue from a member of the Executive Committee of the Junior Yacht Racing Association of Long Island Sound disclaims responsibility for the situation last summer and traces its cause directly to lack of interest by the member clubs. So far, we have not heard the clubs' side of the affair.

We feel, however, that the placing of the responsibility is secondary to the fact that the article in question did bring home the value of carrying on competitive sailing for the youngsters, and showed the slump in interest that invariably follows the cancellation of interclub events and championship competition. In a season that saw racing schedules at yachting centers carried out for the adults, it seems too bad that lack of interest, or lack of finances, kept the juniors on the beach. It seems to us that, during this war period, sailing and racing are what the youngsters need more than anything else, and that every effort, even if it means sacrifice for some, should be made to keep the juniors under eighteen years of age afloat. And we agree with the author that if this is not done, junior yachting organizations will not survive the war, and the work and effort of those who built them up through the past years will be wasted. If Mr. Williams' article brings this thought home, it was well worth writing.

May next summer see "The Kids" carrying on as usual, and as long as it is possible to do so. We hope that yacht clubs and all junior yacht racing organizations will make every effort to see that this comes to pass.

Still a Sense of Humor

THAT our British allies have not lost their sense of humor, in spite of three long hard years of war, for two of which the threat of invasion hung over their heads, is indicated by a story going the rounds of London. It's worth repeating.

It seems that Grosvenor Square, in the heart of London, is the center of U. S. activity in the British Isles. On one corner is located the United States Embassy. Another side is taken over by General Eisenhower's staff and military aides. A third side houses some other American missions. To which the British public react by going around announcing to each other that the name of Grosvenor Square has now been changed to Eisenhower Platz.

Who says the British have no humor?

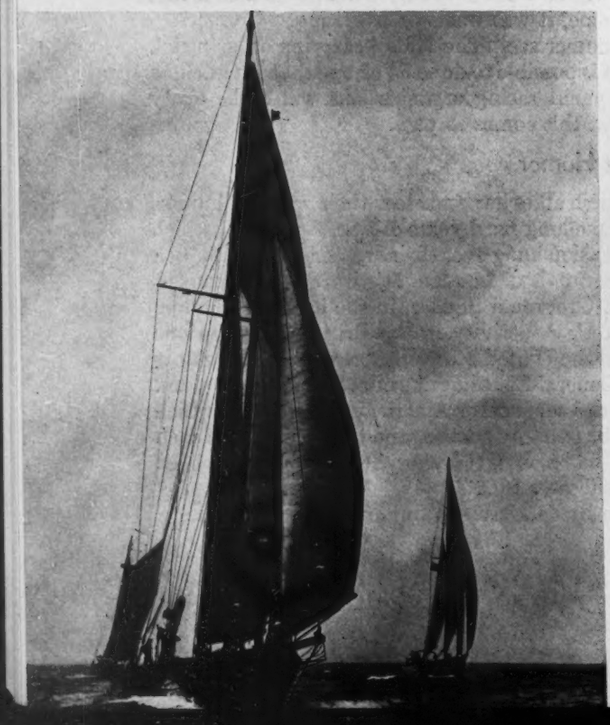
Ellsworth Ford Photos

U. S. Coast Guard

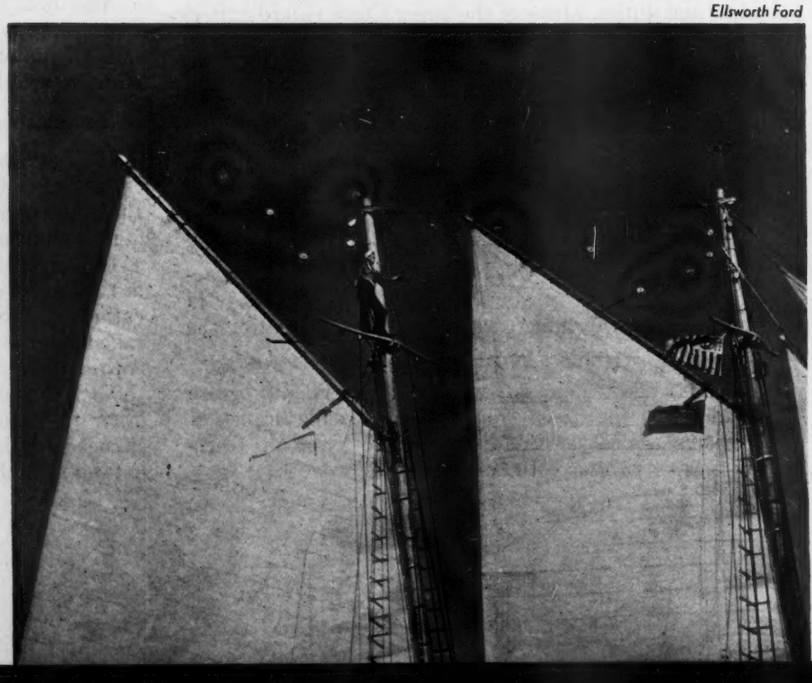
OFFSHORE PATROL

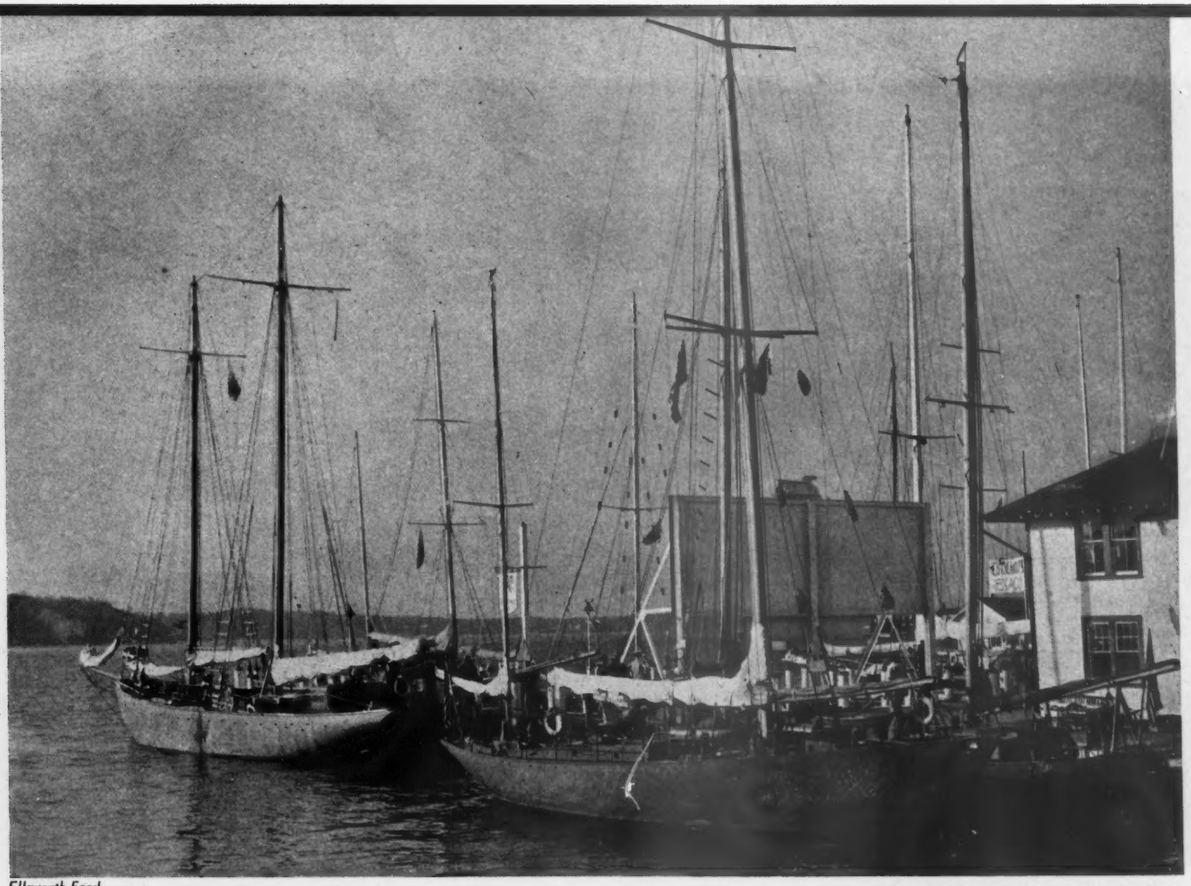
Examine these photographs carefully and you will observe not a few sleek ocean racers which, but a few seasons back, were the pride of a score of Atlantic Coast yacht clubs. Today their once gleaming hulls wear the somber gray paint of the Coast Guard. Trim but businesslike are these vessels of the "offshore patrol" — the Coastal Picket Patrol in official circles — whose duty it is to keep an unceasing lookout for marauding submarines. Stationed at various points along the coastline of the Eastern Sea Frontier, they are manned by former yachtsmen who are now members of the Coast Guard Temporary Reserve with regular Coast Guard ratings. Crews serve for periods ranging from one month to the duration, work hard, take the weather as it comes — and love it!

The main offensive weapon of this rugged service is the ship-to-shore telephone and the radio. Either enables the commander officer to inform his base of any unfriendly or suspicious activity in the area of his patrol. While at sea, vessels are under sail, which prevents an enemy submarine from picking up the telltale vibration of a propeller.



Ellsworth Ford





Ellsworth Ford *U. S. Coast Gua*

Boats go on patrol for a seven-day stretch, during which time crews stand watch four on and four off. While on station, one man is posted forward and two aft, where they are ever alert to report any activity in the sky or on the surface.

The average crew for a vessel of the "Offshore Patrol" is seven men, and is usually under the command of a Chief Bo'sun's Mate. Perhaps the most important member is the cook, for good food means a happy ship. A vessel is apt to be in port for approximately 48 hours, and every moment of this time is used to clean ship and repair gear. While at sea, a watch is occupied by the hundred and one details which are the concern of a vessel on patrol — navigation, signaling, handling small arms, ship identification, and other phases of naval operation. Speed, efficiency, thoroughness are the watchwords of the "Offshore Patrol."

Selected on the basis of their performance record and sea-keeping qualities, the vessels of this unique naval patrol represent a veritable catalog of the naval architect's skill.

Organized to Make Use of Seagoing Yachts, the Coast Guard's "Offshore Patrol" Helps to Protect the Coastal Sea Lanes

Ellsworth Ford Phot

Rosenfeld

Col. Max C. Fleischmann's former motor yacht "Haida," now in service in the Navy. An unusually fine job of conversion from yacht to war use was done by Robert Jacob, Inc. Cooper-Bessemer Diesels drive her

THE MONTH IN YACHTING

THE MARBLEHEAD SEASON

▶ The opening of the racing season at Marblehead was delayed, the schedule was shortened by four contests, and the usual racing courses of the larger classes were ruled out by Navy-Coast Guard restrictions on sailing areas. In spite of this, the owners of 100 racing craft competed this summer.

Naturally, the larger classes suffered the most in number of boats in commission. The Thirty-Square-Metres were reduced to half their normal fleet. In the early season, Alfred Chase's *Viking* had things pretty much her own way but, from Race Week on, *Evanthia*, *Mitamar II* (which came out late), *Ellen* and *Lill-Singva* forced the Chase craft continually. *Ellen's* 82-year-old skipper, Charles P. Curtis, wrested the Corinthian title from *Viking* although the Chase boat won the Eastern crown by a wide margin.

The Internationals were off a third but the top boats, except *Saga*, whose owner, S. Houghton Cox, died during the summer, were out and the competition was good among five of the six. Caleb Loring, Jr.'s, *Pompano* had a comfortable margin in the Corinthian series on P. Copeland's *Periwinkle* but in the Eastern series this pair was nosed out for the championship by A. L. Putnam's *Kungsornen*.

There was a similar loss in numbers in the M-B Class where top honors in both the Eastern and Corinthian series went to E. T. Connolly's *Taira*. The Pleon title for the Wednesday series was taken by William and Robert Cunningham's *Centaur*. William Welch's *Nancy II* was runner up in two series and Walter Bell's *Chinook* finished second in the Eastern. *Firefly*, which Francis Cummings sailed only occasionally, and *Anna O'C* were other dangerous boats.

The National 110 Class measured up to 1941 standards in numbers and competition. Lincoln Davis, Jr., dropping down from the "Squeaks," where he won the 1941 championship with *Roulette*, chartered Ray Hunt's *Hautboy*. She finally prevailed in both the Eastern and Corinthian championships but not until Davis had learned to have a wholesome respect for the ability of 19-year-old George O'Day, in *Vincemus*, and 17-year-old Frank Scully, of *Auk*, who beat the veteran for the New England and National 110 Class championships and captured all the Race Week silverware. Another youngster of fifteen, Bradley Noyes, earned the Fowle Memorial Medal for greatest improvement among juniors by taking the Pleon title, in *Hapi*, from Frank Scully.

The Town Class held up well with 23 boats and competition was keener than ever. Cedric Arnold, in *Hypo*, won the Corinthian and Eastern championships, with Howard Dickinson's *Chyon* pressing in both series, while Edward Lynch's 1941 champion *Buddy* was pushed back to third and fourth place, respectively, although she captured the Pleon title. *Suspense*, *Six Bells*, *Flirt* and *Tip Top* were always dangerous.

Aside from the second division, the Brutal Beast competition was not as keen as in the past. Johnny Marvin's *Rip Tide*, in the First; Marjorie Allen's *June Bug*, in the Third; and Emily Hood's *Sea Biscuit*, in the Fourth, scored clean sweeps. Young Gene Connolly's *Bubble* duplicated the feat of his father's *Taira* by winning the Corinthian and Eastern crowns but he was forced all the way by William Pinkham's *Dawich*, Pleon victor. Jeanne La Croix's *Thistle* won the Corinthian championship of the Herreshoffs, and Helen and Jill Johnson's *Seal* captured the Eastern and Pleon titles as Jack Blodgett's *Why Not* was right in the running.

As a wartime measure, there was no official Marblehead open championship, which ordinarily includes all the season's racing.

Marblehead did not let its junior yachting suffer from the war, and the youngsters enjoyed a successful season. Their biggest triumph was the retention of the Philip J. Roosevelt Trophy in the annual team race with Seawanhaka Corinthian when, for the first time in the history of the competition, the Pleon team of skippers, Frank Scully, Bradley Noyes, Johnny Marvin and Clinton McKim, won at Oyster Bay. Rear Commodore Frank Scully also won the North Shore Junior Championship and Marblehead greatly regretted the fact that the cancellation of the national junior championship prevented a defense of the Sears Cup, for it was felt young Scully would have proved a worthy successor to Bobby Coulson in upholding the prestige of the Marblehead juniors. The highest honor in junior yachting, the award of the Arthur Goodwin Wood Memorial Bowl and Pleon gold merit medal, went to Commodore George O'Day, whose skill, ability, and success are generally credited with starting the recent renaissance of junior helmsmanship which has been evident in races sailed this season at Marblehead.

LEONARD M. FOWLE

This small boat, her design selected by the National Boat Builders Association, recently ran trials off Miami before members of the Navy's Board of Inspection and Survey

NAVY SEEKS MEN FOR SMALL BOAT OPERATION

▶ Yachtsmen who have been unsuccessful in securing commissions in the Navy because of individual deficiencies are advised to consult their district naval office regarding appointment in the newly organized Deck Volunteer Specialist Local Defense. This branch of the service seeks men who are experienced in handling motor boats 25 feet long, who are between 22 and 45 years of age and whose sight, corrected, is 20–20 and, uncorrected, 15–20. Physical requirements have been eased for desirable men; the minimum height required is 5 feet, 4 inches, and the maximum is 6 feet, 4 inches. A wide deviation on weight is allowed if such weight is proportionate to height.

"Lack of formal college education will be waived by us," said Lieut. Leo, of the Third Naval District Officer Procurement Division, "if the applicant boasts sufficient experience in operating and handling power boats, and possesses qualities of leadership, initiative and coolness under stress." Mechanical proficiency or a knowledge of celestial navigation is not required.

Candidates may apply only in person to the Officer Procurement division of their own Naval district, where they must answer some basic questions and be "sized up" generally. A preliminary application form is then forwarded to the candidate and, if this is successfully answered, the budding officer is subjected to a preliminary physical examination. An aptitude test and further interviews follow. Successful candidates are then given a formal application blank and the career of a new officer in our ever growing sea forces is well under way.

Within the 22 to 45 year age bracket, commissions as ensigns, junior grade lieutenants and senior lieutenants are available with the officers serving aboard a wide variety of vessels.

Thirty-seven offices of Naval Officer Procurement are maintained throughout the country and candidates for commissions may apply at any one of these. The principal offices are at Boston, New York, Philadelphia, Charleston, S. C., Richmond, Va., Washington, D. C., Miami, New Orleans, Chicago, Los Angeles, San Francisco and Seattle.

The offices of Naval Officer Procurement have also sent out a call for applicants in the Construction Battalions, "Seabees," of the Civil Engineer Corps, U.S.N.R., for duty in connection with the Navy's construction program. Successful candidates will be commissioned in all ranks up to and including lieutenant-commander.

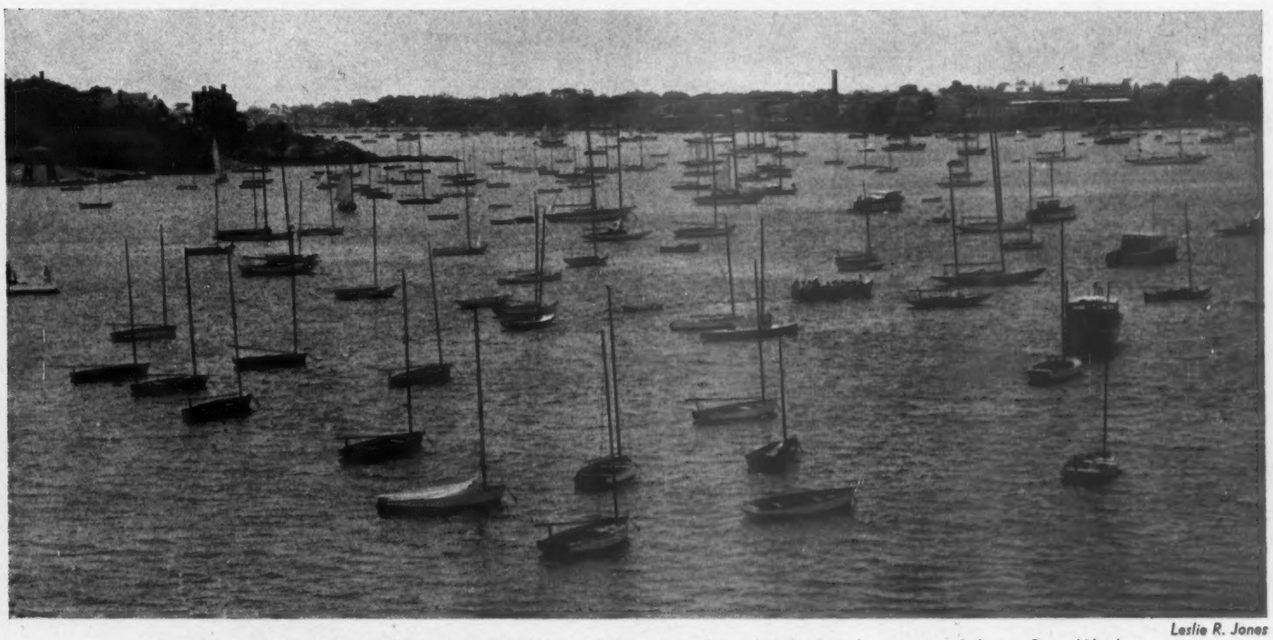
Requisites for appointment include experience in handling men and equipment on construction work in the field, with emphasis on a record for getting work done. In addition to these general requirements, all applicants must have graduated from a recognized institution with a degree in civil, electrical, mechanical or architectural engineering, or have had sufficient responsibility and experience in construction and engineering work in the field for a period of at least ten years to demonstrate ability and qualities of leadership.

Applicants who have not reached the age of 50, and who can meet the required physical standards, should apply to the Officer Procurement division of their district.

PORTABLE DIRECTION FINDERS WANTED

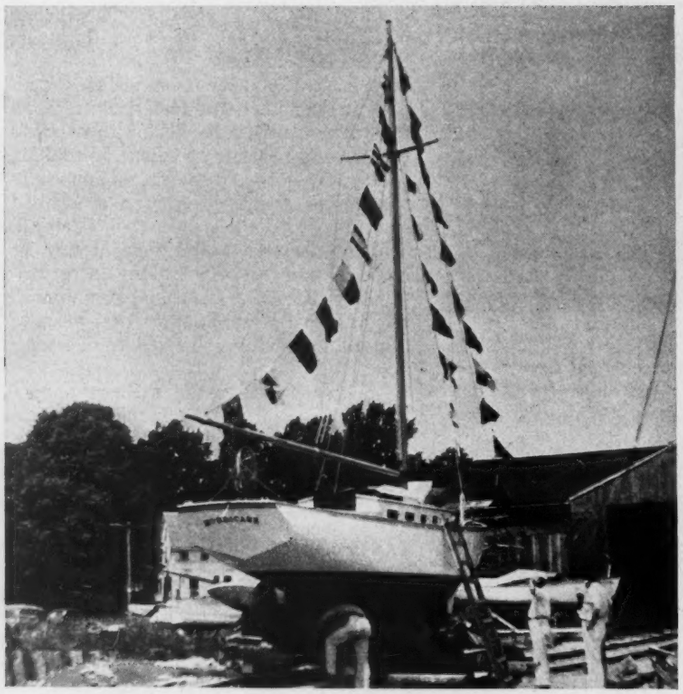
▶ Portable direction finders of all types and sizes are needed immediately for Coast Guard vessels in the Picket Patrol Fleet and boat owners are asked to demonstrate their patriotism by turning over such equipment, Lieut. Rufus G. Smith, U.S.C.G.R., has announced. "The need is urgent," said he. "Manufacturers are unable to supply the needs promptly and therefore private boat owners are asked to loan their direction finders to the service for the duration."

Sets may be shipped to the Greenport Coastal Picket Base, U.S. Coast Guard, Greenport, L. I., which is acting as a clearing house and conditioning shop for the equipment in the Third Naval District. Sets which are available in other localities should be sent to the Communications Officer of the local Coast Guard District. The direction finders, if in good condition, will be sent back to their owners at the conclusion of the war, with the heartfelt thanks of the Coast Guard.

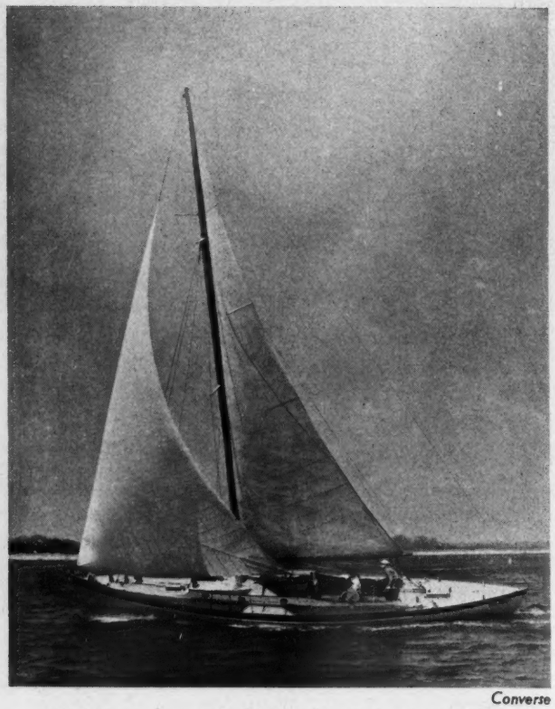


Leslie R. Jones

Marblehead Harbor has not been as crowded as usual this season but a hundred yachts competed during Race Week



"Hurricane," built by Frederick Jenney, from plans in "Yachting"



Converse

"Amalasonta," a glorified whaleboat by Palmer Scott

"HURRICANE"

▶ Frederick Jenney, of Duxbury, Mass., started to build himself a boat on the day that the 1938 hurricane struck his home town. She is from designs by John G. Hanna, of Dunedin, Fla., and her plans were published in YACHTING in the issues for December, 1933 and January and February, 1934. Known as *Gulfweed*, she was originally a V-bottom boat but her designer redrew her plans and produced a round bottom craft of the same dimensions. She is 28′ 0″ in length over all; 21′ 6″ on the water line; 9′ 0″ beam and 3′ 2″ draft. Her displacement is four tons and she carries 450 square feet of canvas. She is a husky boat with lots of room in her and has proved a comfortable cruiser. She was launched early in the summer just past and has been sailing in Duxbury Bay.

A TRIM DOUBLE-ENDER

▶ This interesting yacht was designed by Bruce W. Williams and built by Palmer Scott & Co., Inc., of New Bedford. She was the second yacht whose model was derived from the famous New Bedford whaleboat from that designer's board. Another boat, of almost the same dimensions, was described and illustrated in the May, 1940, issue of YACHTING.

The principal dimensions of *Amalasonta*, as she is named, are as follows: Length over all, 43′ 0″; beam, 8′ 6″; and 5′ 9″ draft. Her total displacement is less than 10,000 pounds and she carries between 500 and 600 square feet of canvas. She is framed with oak, the frame spacing being 8″, and she has a wooden fin keel on the bottom of which is 4000 pounds of lead. She is planked with native cedar. As auxiliary power, she has had a small Chrysler installed this year and she is now just about as fast under power as she is under sail — and she can do eight knots with the sheets slightly started in any kind of a breeze. In any breeze up to 20 knots, she will carry her working rig in fine style. The propeller is located abaft the rudder and not ahead of it.

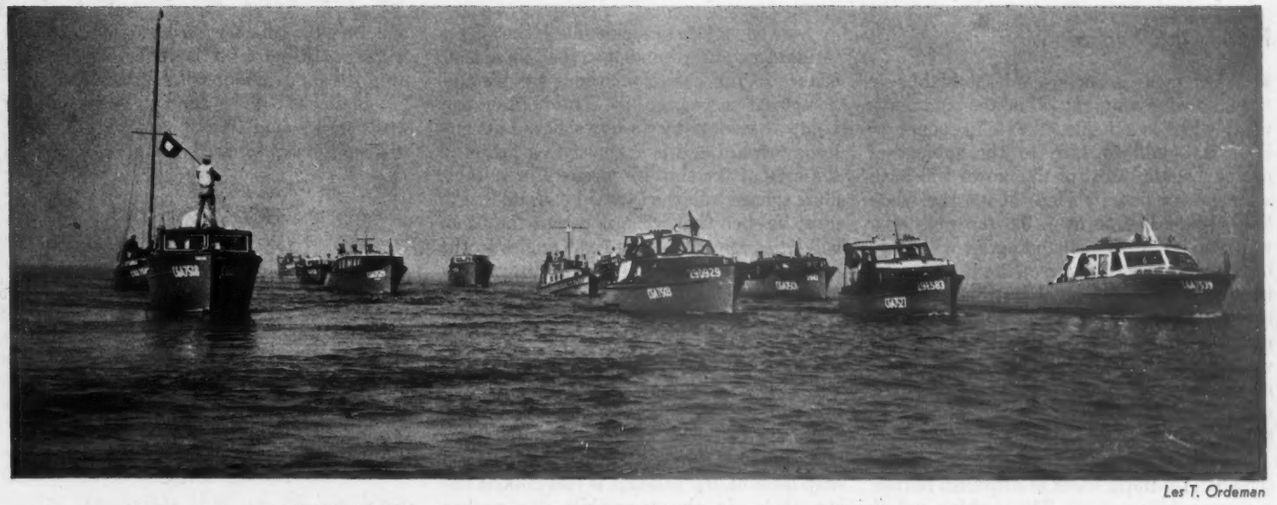
Altogether, a most interesting boat.

MANHASSET BAY RACE WEEK

▶ The weather man frowned on the Manhasset Bay Y.C., providing a hard wind for the opening day, September 9th, and light winds and calms for two out of the three remaining days. However, a good sized fleet turned out and, sailing shortened courses, managed to get some interesting racing. Only on the second day was there a good breeze. On the last day, but one class, the Manhasset Bay One-Designs, was able to finish.

In the Star Class, William Picken, 3rd, sailed his father's *Fo-Fo* to victory with a first, a second and a third. T. S. Clark's *Pasha* was second. *Sagola*, G. R. Hinman, took the Atlantics by a margin of one point from J. W. Meader's *Ajax*, 21 to 20. In the open Comet division, George Aitken, in *Cootie*, defeated Philip Marriner, in *Blue Bird*, by a single point, 17 to 16.

The top honors in the Internationals went to *Susan*, R. A. Mosbacher, despite the fact that she had abandoned the contest the first day to tow A. P. Davis' *Patricia* home after she had been dismasted. *Alberta*, Alfred Marx, was second. *Allouette*, G. B. MacNary, and *First Call*, Lingard Loud, tied for first in the Victories but *Allouette* won as she had beaten *First Call* on total elapsed time.



Les T. Ordeman

Flotilla 75 of the Coast Guard Auxiliary holds fleet maneuvers off Portland, Oregon

WITH THE U. S. COAST GUARD AUXILIARY

▶ Prior to the war, the Coast Guard was broken up into various geographical districts, while the Navy operated on a basis of numerical areas with Boston the headquarters for the First Naval District, New York for the Third, and so on. Now that the Coast Guard is operating as a part of the Navy, many Auxiliary members find it difficult to identify their particular field of operations. The following listing itemizes the various Coast Guard districts, and the Naval Districts of the United States and its possessions in which they operate:

The Boston District, with district headquarters at Boston, Mass., comprises: the States of Maine, New Hampshire, Vermont, Massachusetts, and Rhode Island, and all United States Naval Reservations on shore in Newfoundland. (*Operating as part of the 1st Naval District.*)

The New York District, with district headquarters at New York, N.Y., comprises: the State of Connecticut; State of New York (east of long. 74° 39′ W.); and the northern part of New Jersey, including counties of Mercer, Monmouth, and all counties north thereof. (*Operating as a part of the 3rd Naval District.*)

The San Juan District, with district headquarters at San Juan, P.R., comprises: the Panama Canal Zone, all of the island possessions of the United States pertaining to Puerto Rico and the Virgin Islands, and all United States Naval Reservations in the islands of the West Indies and on the north coast of South America. (*Operating as a part of the 10th Naval District.*)

The Norfolk District, with district headquarters at Norfolk, Virginia, comprises: the States of Maryland and Virginia, and the counties of Currituck, Camden, Pasquotank, Gates, Perquimans, Chowan and Dare in North Carolina; and all United States Naval Reservations in the islands of Bermuda. (*Operating as a part of the 5th Naval District.*)

The Key West District, with district headquarters at Key West, Florida, comprises: the State of Florida, less Nassau and Duval counties and those west of the Apalachicola River. (*Operating as a part of the 7th Naval District.*)

The New Orleans District, with district headquarters at New Orleans, La., comprises: the States of Texas and Louisiana; that part of the States of Alabama, Mississippi, and Arkansas south of Lat. 34° N.; and that part of the State of Florida not included in the Jacksonville District. (*Operating as a part of the 8th Naval District.*)

The St. Louis District, with district headquarters at St. Louis, Mo., comprises: the States of West Virginia, Kentucky, Tennessee, Oklahoma, Kansas, Nebraska, North Dakota, South Dakota, Iowa, and Missouri; the States of Pennsylvania, Ohio, Indiana, Illinois, Wisconsin, Minnesota, Arkansas, Mississippi, and Alabama, not included in the Philadelphia, Cleveland, Chicago or New Orleans Districts. (*Operating as a part of the 9th Naval District.*)

The Cleveland District, with district headquarters at Cleveland, O., comprises: the States of New York (west of New York District and north of Lat. 42° N.), Ohio (north of Lat. 41° N. and east of Long. 84° 45′ W.), Michigan (not included in the Chicago District), and that part of Wisconsin and Minnesota north of Lat. 46° 20′ N. (*Operating as a part of the 9th Naval District.*)

The Chicago District, with district headquarters at Chicago, Ill., comprises: the State of Michigan, south of Lat. 46° 20′ N. and west of Long. 84° 45′ W.; Wisconsin, east of Long. 90° W. and not included in the Cleveland District; Indiana, north of Lat. 41° N.; and Illinois, north of Lat. 41° N. and east of Long. 90° W. (*Operating as a part of the 9th Naval District.*)

The San Francisco District with district headquarters at San Francisco, Cal., comprises: States of Nevada, Utah, Colorado, and that part of the State of California not included in the Los Angeles District. (*Operating as a part of the 12th Naval District.*)

The Honolulu District, with district headquarters at Honolulu, Territory of Hawaii, comprises: the Territory of Hawaii and the Pacific Islands belonging to the United States west of Long. 140° W. and south of Lat. 42° N. (*Operating as a part of the 14th Naval District.*)

The Seattle District, with district headquarters at Seattle, Wash., comprises: the States of Washington, Oregon, Idaho, Montana, and Wyoming. (*Operating as a part of the 13th Naval District.*)

The Ketchikan District, with district headquarters at Ketchikan, Alaska, comprises: the Territory of Alaska. (*Operating as a part of the 13th Naval District.*)

The Los Angeles District, with district headquarters at Los Angeles, California, comprises: the States of New Mexico and Arizona, and the southern part of California, including the counties of Santa Barbara, Kern, and San Bernadino, and all counties south thereof. (*Operating as a part of the 11th Naval District.*)

The Philadelphia District, with district headquarters at Philadelphia, Penn., comprises: State of Pennsylvania, east of Long. 79° W.; southern part of New Jersey, including counties of Burlington, Ocean, and all counties south thereof; and Delaware, including Fenwick Island Light. (*Operating as a part of the 4th Naval District.*)

The Charleston District, with district headquarters at Charleston, South Carolina, comprises: the States of South Carolina, Georgia, and North Carolina, except the counties of Currituck, Camden, Pasquotank, Gates, Perquimans, Chowan, Dare, Tyrrell, Washington, Hyde, Beaufort, Pamlico, Craven, Jones, Carteret, and Onslow; the counties of Nassau and Duval in the State of Florida. (*Operating as a part of the 6th Naval District.*)

(Continued on page 82)

"GADGETS & GILHICKIES"

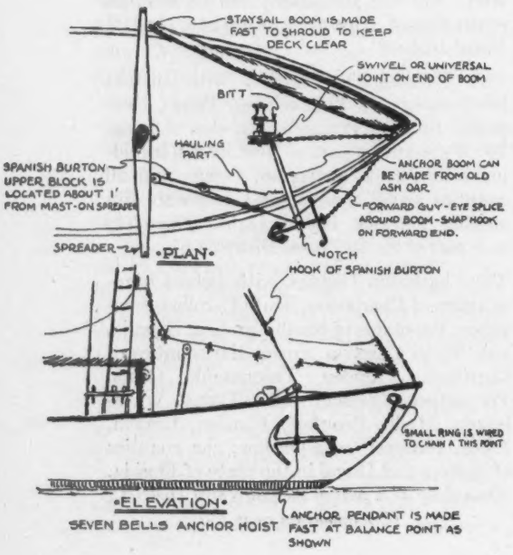
Fishing the Anchor

▶ When men gather around the clubhouse fire on a winter's night, while the cold north wind whistles outside, the talk sooner or later is bound to turn to the subject of cruising boats. Most of the crowd will have some pretty definite ideas about the boats they would like to own. To the man who wants to go off single-handing, or with only his wife as crew, the size of the boat he can handle is directly limited by the weight of her ground tackle. A number of ingenious methods of getting the anchor have been worked out by cruising men in an effort to make the work easier. I am going to describe the scheme used by the brothers Cooke in their ketch *Seven Bells*.

About a foot out from the mast, on the spreader, the upper block of a Spanish burton is permanently secured. The working end of this tackle terminates in a hook which, when not in use to get the anchor, is hooked to an eye on the inboard end of the staysail boom to act as a lift. When the anchor is coming aboard, the end of this boom is carried over to the port shrouds and secured there with a suitable lanyard; this leaves a clear forward deck on which to work.

To the balance point of the anchor (including the weight of some chain) a manila pendant is securely and permanently lashed. This pendant will be long enough to reach above the deck while the anchor is still a foot or two under water. Its upper end terminates in an eye splice and a snap hook which is normally hooked to a small ring wired to the anchor chain at a point as far up the chain as the length of the lanyard will permit.

On the starboard side of the bitt of *Seven Bells*, a pad eye is secured at a convenient height above the deck and in a position to clear the anchor chain. This eye serves as the inboard bearing for a swivel fitting that is mounted on the end of a short boom. A spinnaker pole fitting would be fine for this purpose. This boom was made from the loom of an ash oar, cut to such a length that when its inner end was secured to the bitt the outer end extended outboard about half the length of the anchor stock. In the outboard end of this boom, a deep notch is cut


STAYSAIL BOOM IS MADE FAST TO SHROUD TO KEEP DECK CLEAR
SWIVEL OR UNIVERSAL JOINT ON END OF BOOM
BITT
HAULING PART
SPANISH BURTON UPPER BLOCK IS LOCATED ABOUT 1' FROM MAST-ON SPREADER
ANCHOR BOOM CAN BE MADE FROM OLD ASH OAR
FORWARD GUY - EYE SPLICE AROUND BOOM - SNAP HOOK ON FORWARD END.
SPREADER
•PLAN•
NOTCH
HOOK OF SPANISH BURTON
SMALL RING IS WIRED TO CHAIN A THIS POINT
•ELEVATION•
SEVEN BELLS ANCHOR HOIST
ANCHOR PENDANT IS MADE FAST AT BALANCE POINT AS SHOWN

— wide enough to be a close fit on the anchor pendant and deep enough so that there is no chance of the line slipping out by mistake. Somewhat outboard of the center of the spar, a guy is secured by an eye splice. This guy leads forward and is snapped to a fitting in the eyes of the ship by means of a suitable hook spliced into the forward end; its length must be such that when it is taut the boom will lie at approximately right angles to the rail. The anchor is let go in the usual way with the pendant snapped to the chain.

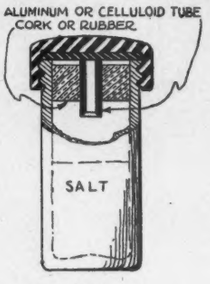
In getting the anchor, this is the procedure: First of all, the staysail boom is carried to port and secured to the shroud so as to provide a clear working space. Then the hauling part of the Spanish burton is cast off and its hook is brought forward and secured temporarily. Now the chain is hove in until the snap hook on the pendant is just outside the hawsehole. In the meanwhile, the anchor boom has been placed in position, with its forward guy in place. The anchor pendant is now unhooked from the chain, brought aft and laid in the notch in the boom end and the hook of the Spanish burton is hooked to the snap hook in the end of the pendant. The operator now stands with one foot on the boom at a point near the rail, to keep it from riding up, and hauls away on the burton. The anchor may now be dragged in the water to remove any mud that may have stuck to it, without fear of damage to the topsides. When the mud is gone, the anchor is hauled up until it is "two blocks" with the end of the boom. The operator removes his foot at this point and allows the boom to cock up as the anchor is hauled upwards and, at the same time, inboard until it can be lowered to the deck and secured for sea. The boom and its guy are now stowed, the burton secured in the rigging. The rest of the anchor chain is hauled in, and the job is done.

It is interesting to note that this method of handling ground tackle is practically identical with that used in ships of the eighteenth century and before, as described by Darcy Lever, Esq., in his "Young Sea Officers Sheet Anchor," published in 1808.

You Can Keep the Salt Dry!

▶ It has been said that necessity is the mother of invention. I shall venture the remark that annoyance must be an aunt of the subject. My annoyance with the state of the saltcellars in our house in the damp spell that persisted through most of August this year goaded me into activity and I "invented" a saltcellar that will work, come hell or high water. Basically (as the engineers say), it is just a pill bottle with a plastic screw-top inside of which is a gasket which seals it up tight when screwed down. Into the neck of the bottle I fitted a cork which I turned down to be a snug, but not a tight, fit. In the center of this cork is fitted tightly a short length of aluminum rod which has a hole about 1/16" diameter drilled through its center, as shown in the sketch. A short piece of an old celluloid knitting needle would also be ideal for this purpose or a small tube of glass or any non-corrosive material.

When inserting the tube in the cork, allow the end to protrude enough so that, as the plastic top of the bottle is screwed down, it will force the tube farther into the cork. This will serve to seal the orifice effectively against even the small amount of moisture that may become locked under the cap in very damp weather. I found that it was not necessary to keep the cap screwed on during a meal so



that one was not put to the trouble of unscrewing it every time the salt was wanted. There is no provision for removing the cork when it is necessary to refill the bottle; that is why the cork is not a tight fit. Simply pry it out with the point of a knife. This idea should rate the "Nobel Prize for Keeping Peace at the Table."

Keeping the Ice Cold

▶ Once long ago, before the "More Abundant Life" descended like a thick fog on that alley which terminates in a graveyard at one end and a river at the other, and is called Wall Street, there used to be a story going the rounds. It seems that, at the international yacht races at Newport, where the finest fleet of yachts you can imagine was assembled in Brenton's Cove, a certain prominent banker stood with his guests on the luxurious after deck of his ocean-going yacht and surveyed the scene. One of the guests (who could still see, although not without a certain amount of concentration) began to ask questions about many of the biggest and sleekest of the fleet. "What yacht is that? Who owns her?" and so on. Almost invariably, his host replied that the boats belonged to a banker or to a prominent stock broker. It began to be monotonous; pretty soon the guest could stand it no longer. "Where are the customers' yachts?" said he.

Today the question is: "Where are the brokers' yachts?" And the answer is: The lawyers own 'em. It's surprising the number of legal lights who are piloting schooners over bars these days.

One of these seagoing barristers, "Mort" Doolittle by name and skipper of the yacht *Jumbo*, of Stamford, sent in a contribution recently which seemed to me to have merit. He says — quote — In our former *Jumbo*, we had a small ice box that was almost on top of the engine. In addition to this strategic location, this ice box apparently had no insulation whatsoever and, as a result, the ice would always be entirely melted about one hour after we got under way. We solved this distressing problem with a crazy scheme. We wrapped a piece of dry ice in one sheet of newspaper and placed it right on top of the wet ice in the box. The dry ice kept the wet ice cold and hard as a rock, there was ample refrigeration, our problem was solved — end quote.

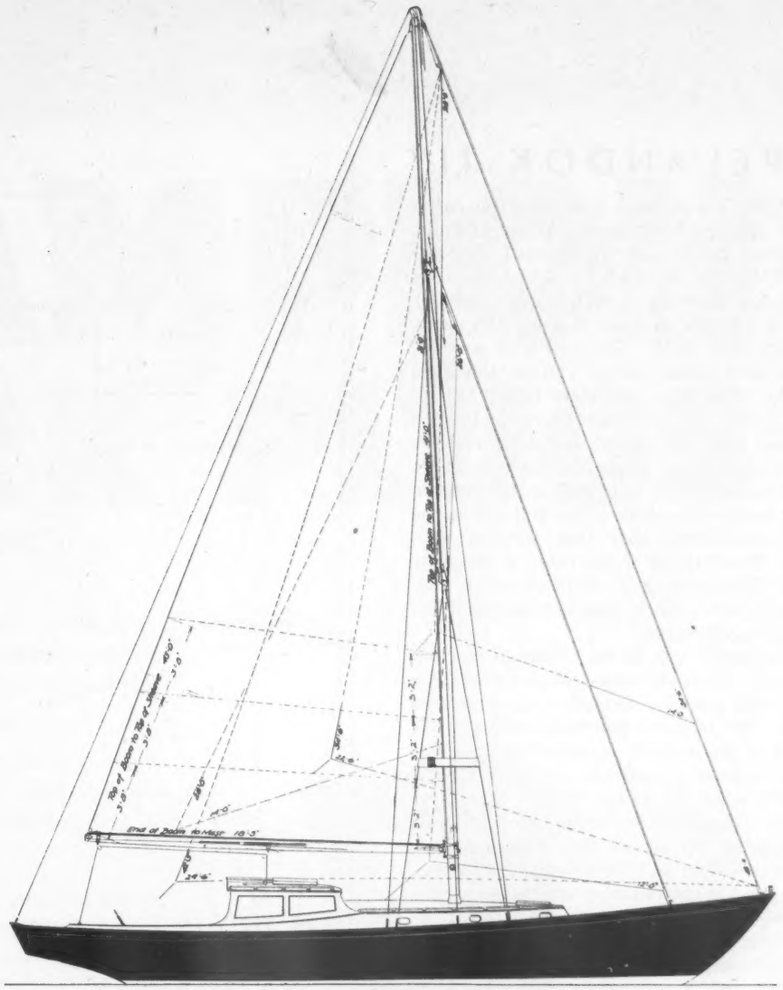
HAM DE FONTAINE

DESIGN FOR A FAST CRUISER

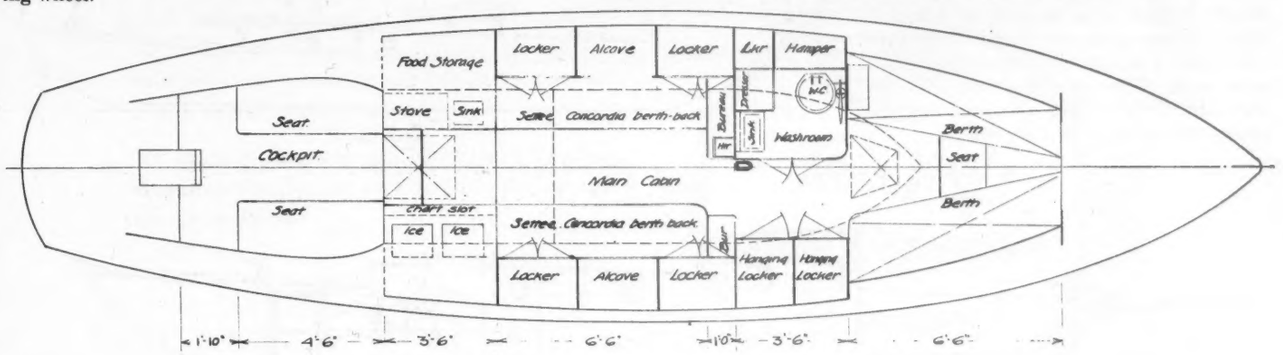
HERE are the plans for a cruising cutter, designed to be a comfortable boat with a good turn of speed, from the board of Henry A. Scheel, formerly of Provincetown, Mass. Her principal dimensions are as follows: Length over all, 38′ 8″; length on the water line, 28′ 2″; beam, 9′ 6″; draft, 6′ 4″. Her displacement is 17,000 pounds and she carries 6850 pounds of ballast on her keel. She has moderate ends and a graceful sheer and her rig is all inboard. Her sail area is 710 square feet, 370 of this being in the mainsail and 340 in the fore triangle. Spars are hollow and rigging of stainless steel. The rig is modern, short on the base and fairly lofty, with a permanent backstay fitted.

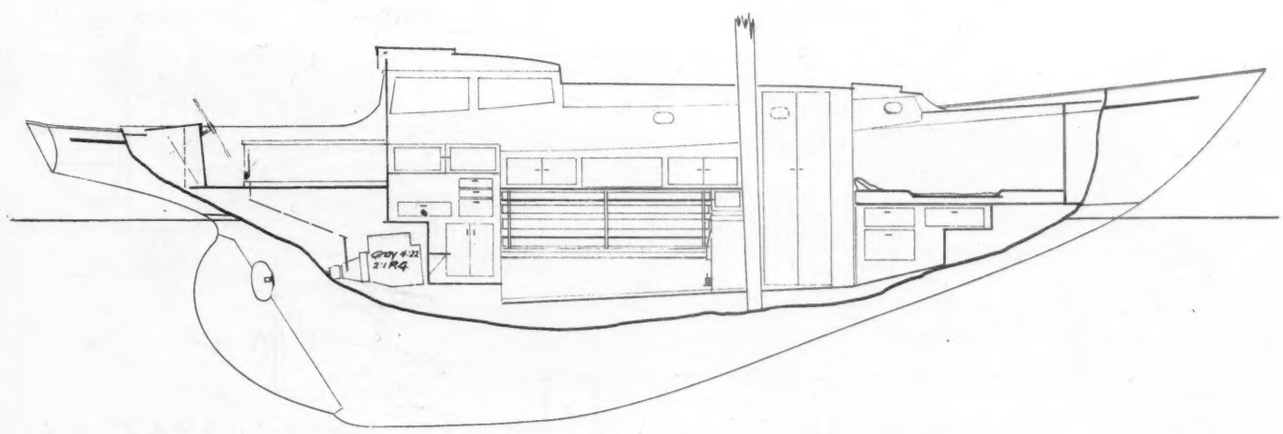
The auxiliary engine is a Gray 4–22 fitted with a reduction gear of 2:1 ratio. The propeller is set on the center line and the shaft is almost horizontal. Most of the propeller aperture is cut out of the deadwood, only a small part of the opening being taken out of the rudder. Ample fuel and water tanks are provided.

The arrangement plan is interesting, with the good sized doghouse aft with ample headroom. In the cabin, the headroom is more than 6′ 0″ throughout. Forward is a stateroom, with a built-in berth on each side and a bureau between. Next aft are two hanging lockers, to starboard, and a toilet room to port. The main cabin is roomy, a Concordia berth being fitted on each side and plenty of locker space being arranged. The cockpit is capacious, with good space each side of the steering wheel.



Sail plan and, below, accommodation plan of fast cruiser





A plan reproduced in this section is the property of the designer under whose name it appears. For further information concerning any design, address the naval architect in question.

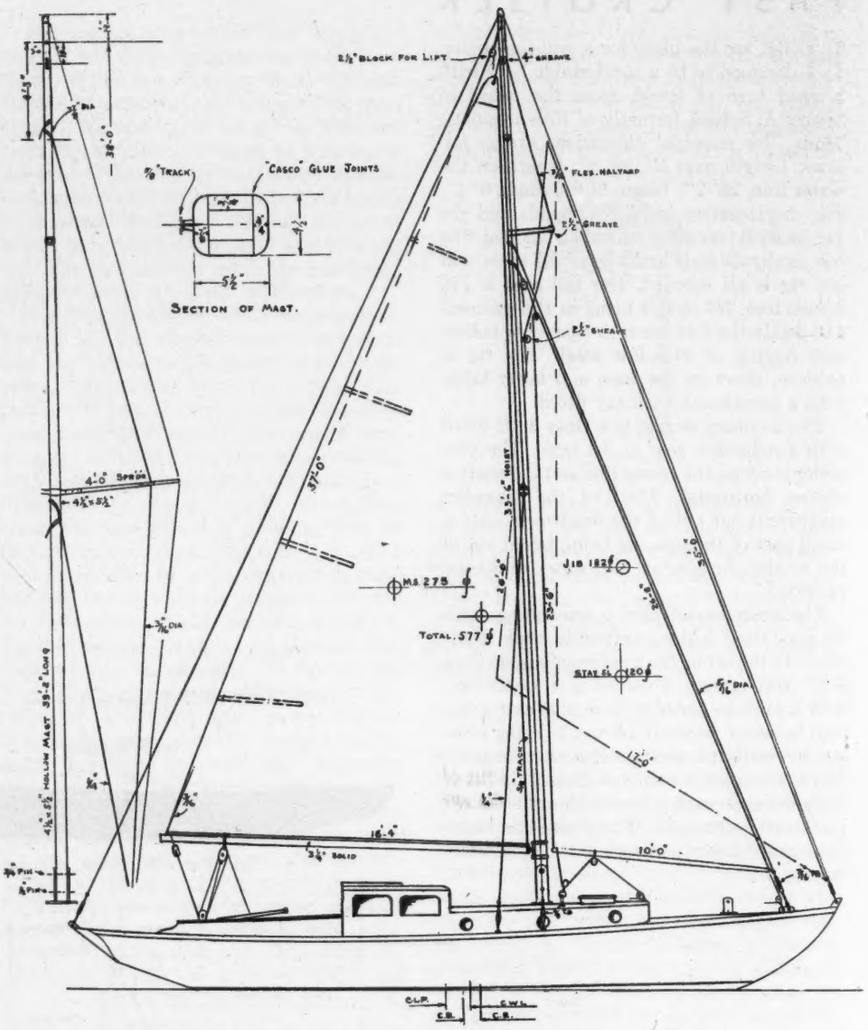
"PELANDOK II"

HERE are the plans of a welded iron cutter designed by J. Murray Watts, of Philadelphia, for George N. Maxwell, Jr., and built by the Edmond E. Robins Co. Her principal dimensions are: Length over all, 34′ 6″; length on water line, 24′ 0″; beam, 9′ 2″; draft, 5′ 0″. The hull is of wrought iron, with welded seams. The scantlings are husky, the main keel plate being ¾″ by 5′ 5″, stem ½″ by 3″, and frames 2″ by ¼″, spaced 19″. The shell plating is ⅛″ and the deck and house plating of the same thickness. The ballast keel, of iron, weighs 3170 pounds. The inside and outside of the hull and cabins are sand-blasted and then sprayed with zinc. The interior of the cabin is sheathed with Prestwood and insulated with rock wool. Unisorb felt is used to soundproof the engine compartment.

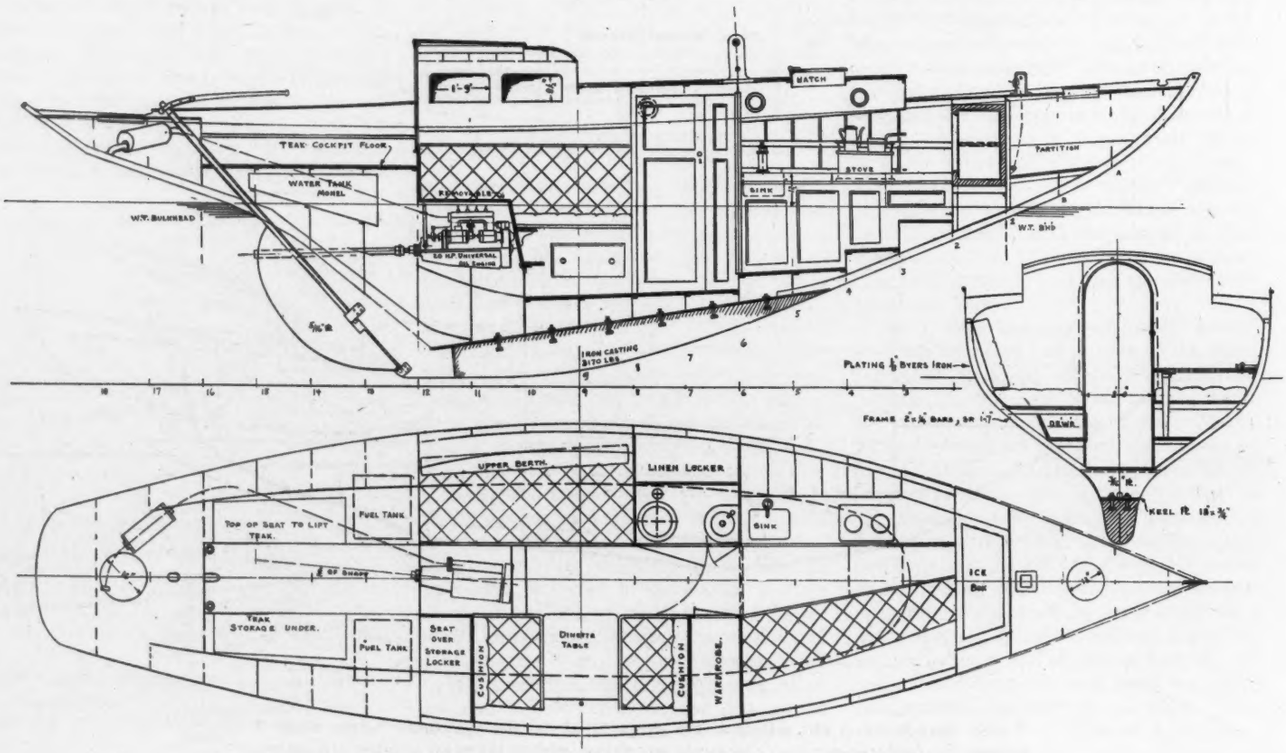
The engine is a 20 hp. Universal burning fuel oil. It is rubber-mounted and drives the cast steel propeller through a stainless steel shaft. Two 15-gallon fuel tanks are under the seats in the cockpit, arranged so that any waste is drained overboard. A 30-gallon water tank is under the cockpit floor.

She is rigged as a Marconi sloop, the sail area being 577 square feet. Pigeon hollow spars are fitted and the sails are by Larsen. The mast is stepped in a tabernacle on the house, the latter being stiffened by a steel bulkhead.

The arrangement plan shows a single berth forward with Monel-finished galley opposite. Next aft comes the toilet room and wardrobe. The main cabin has a transom berth to port with a folding upper over it and, on the starboard side, a dinette which makes up into a wide berth. There is a doghouse over the after part of the cabin, with a long companionway taking up most of its length.



Sail plan and, below, accommodation plan of "Pelandok II"



CHAMPION SPARK PLUGS

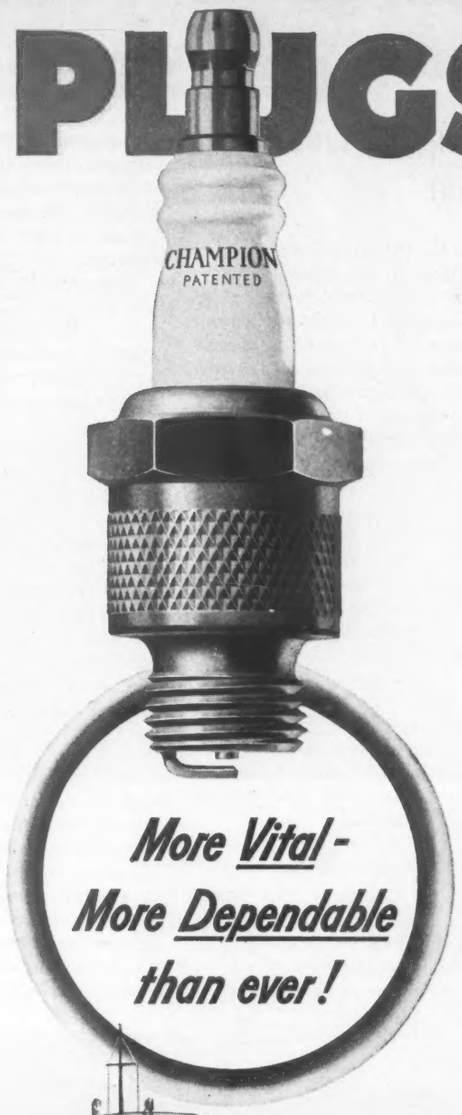
★ Champion Spark Plugs have always been favorites with marine engine builders, owners and operators because of their rugged dependability.

Today Champions are serving the nation in a wide variety of power craft used in wartime activity on the vital coastal and inland waterways.

In this service, Champions are proving themselves more than ever true champions—"more vital, more dependable than ever."

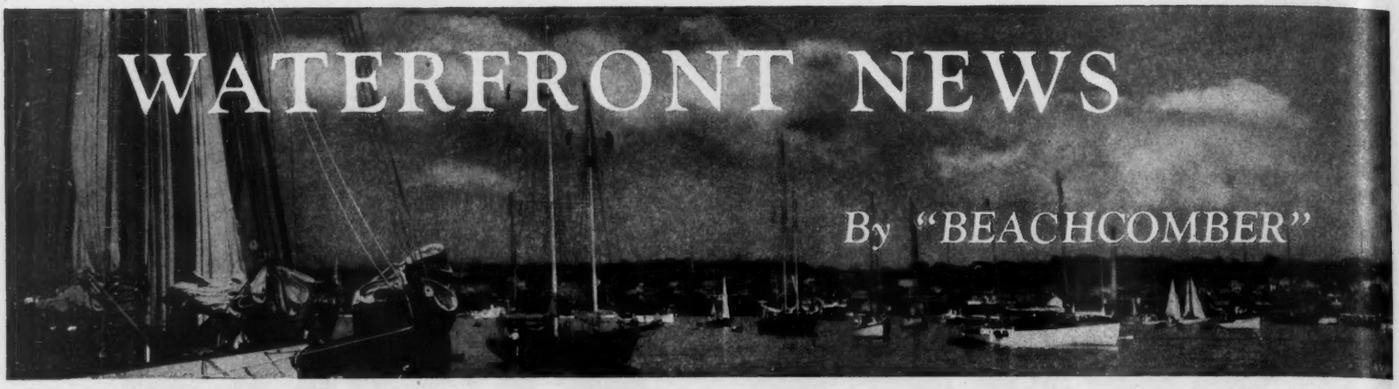
For the requirements of wartime service are such that regardless of wind and weather, regardless of climatic conditions, all marine engines must yield dependable service at all times, and all the time.

To be sure that you get better performance from every engine, be sure that the spark plugs are Champions!



Champion-equipped U.S. Army Q Boat, U.S. Army Aircraft Rescue Boat, U.S. Navy Picket Boat, U.S. Navy Landing Boat built by Chris-Craft.

TO SAVE GASOLINE — KEEP YOUR SPARK PLUGS CLEAN



WATERFRONT NEWS

By "BEACHCOMBER"

SO YOU WANT TO STUDY NAVIGATION!

▶ Never before has the subject of navigation been so important to sea-minded citizens everywhere. No crystal bowl is needed to produce the answer, for not only are increasingly large numbers of yachtsmen desirous of mastering the science of the sextant, but the requirements of the Navy and the Coast Guard make navigational proficiency a requirement for all those seeking commissions in our sea forces. It is not altogether correct to state that one must be a navigator to secure a commission, but there is no denying that this skill is a prerequisite for advancement.

For the benefit of all those who would like to plumb the depths of Bowditch, we submit the following résumé of the what, where and when of certain navigational courses which have come to our attention. This compilation is by no means complete, and it is therefore suggested that local Power Squadron, Coast Guard Auxiliary and yachting groups be consulted. An increasing number of educational institutions have initiated courses in the subject, and communication with your nearest seat of learning is suggested.

NATIONAL

United States Power Squadrons. The Power Squadron work includes classes in Advanced Piloting, Junior Navigation and Navigation. These are open only to members who have worked up the ladder and passed the examination given at the conclusion of the elementary and other courses in order. However, the other qualifications for membership are not stringent, the dues are nominal and anyone anxious to learn navigation completely and thoroughly and who has the time could hardly do better than to join his local Power Squadron. The courses are thorough and detailed but they do take time. Ordinarily, only one course of each grade is given by each squadron during the year so that it requires from three to four years to work up to the grade of Navigator.

However, in some cases it is possible for experienced yachtsmen who have otherwise learned or picked up much of the information given in the Elementary and Advanced Piloting courses to take and pass the examinations and go on with the Junior Navigator and Navigator courses.

If you are interested in the courses of the U. S. Power Squadrons and do not know how to get in touch with your local squadron, communicate with James R. Clarke, 40 Exchange Place, New York, head of the Squadron's Bureau of Information.

Weems System of Navigation Schools. Streamlined is a word which might be used in describing the various courses given by the Weems School. In contrast to the Power Squadrons' courses, these are lined up to give the greatest amount of information in the shortest period of time; in other words, for the man (or woman) who is primarily interested in learning how to navigate, rather than in making a hobby of studying the subject. Head of the school is Lieutenant Commander P. V. H. Weems, U.S.N. (Retired), an internationally recognized authority on the science of navigation who has developed several widely used refinements in methods, equipment, and tables.

The Weems agencies (which can give all the necessary information) are:

Lt. John D. Shore
14 Randall Road
West Roxbury, Mass.

Miss Gabriella Placht
Beacon Book Shop
46 E. 46th St.
New York City

WSN Schools
The Franklin Institute
Philadelphia, Pa.

Lt. J. T. Engeman
701 St. Paul Street
Baltimore, Md.

Lt. J. T. Engeman
Columbia Tech. Inst.
1319 F St., N.W.
Washington, D. C.

Gordon C. Thompson
PAA Navigation Section
University of Miami
Coral Gables, Florida

J. J. Dossat
Box 261, Route 3
West End, New Orleans, La.

Pacific Air Navigation
510 Mira Monte Plaza
La Jolla, California

Charles A. Zweng
Pan American Navigation Service
12021 Ventura Blvd.
North Hollywood, California

Aviation Institute of Denver
(Mr. Riddell)
Denver, Colorado

Creighton Merrell
1413 25th. Ave. North
Seattle, Washington

NEW YORK CITY AND VICINITY

George N. Wallace. This course, now in its sixth session, is endorsed by the Cruising Club of America, The Corinthians and the Storm Trysail Club. Classes meet at 7:00 p.m. every Monday evening at the Dartmouth Club, 37 East 39th St., New York. Information may be obtained from Mr. Wallace at 277 North Ave., New Rochelle, N. Y., or from Critchell Rimington, 205 East 42nd St., New York.

(Continued on page 80)

Marie Higginson

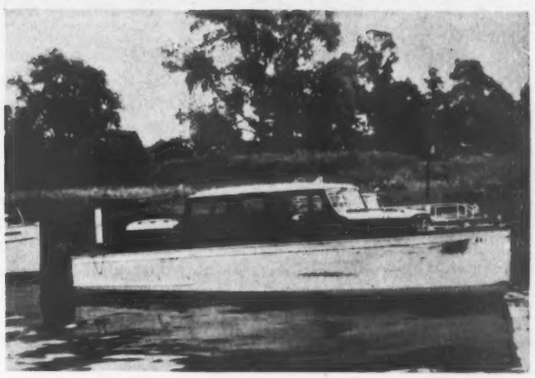
Christening the 74' ship's pilot house and flying bridge for navigation students at the Merchant Marine School, Seaman's Church Institute, N. Y.

Out of the

DEATH HOLE OF DUNKIRK

★ More than one Richardson Cruiser helped in the miraculous evacuation of Dunkirk . . . defying the Stukas that battered those troop-jammed beaches . . . shuttling back and forth across the gun-strafed Channel . . . loaded to the limit with heroic troops snatched from the very jaws of death. In this . . . in coastal and Thames River patrol . . . many standard Richardson Cruisers survived bombings and beatings almost impossible of belief.

Out of all this we have gained more than pride of product. Through the ordeal of war we have learned new ways to make good boats still better. We have discovered previously unknown materials, found faster and more efficient methods. Tomorrow, when we once more build for peace and pleasure, Richardson will again establish a new ceiling for cruiser performance and value.



A 1938 Richardson Cruiser . . . "Still structurally perfect, photographed immediately after return from Dunkirk." Frank Norrington, Richardson Dealer, London, Eng.

RICHARDSON BOAT CO., INC., NORTH TONAWANDA, N. Y.

Building for the Army, Navy and Coast Guard

RICHARDSON
CRUISERS *for Peace time*
FIGHTING CRAFT *for War*

Laying Up For the Winter

. . . OR LONGER? Be sure you take proper precautions to guard against damage. There are many tasks to be done at this season of the year which will protect your investment and mark you as a capable seaman . . . draining of tanks, proper stowage of sails and equipment, repairing, checking for signs of minor wear and tear that may become major before you next take to the water.

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THE AUXILIARY COMES OF AGE

(Continued from page 25)

Engineering, Fire Equipment and Ventilation and, in their spare daytime hours, practicing landing drills, boat drills, gunnery and rifle and pistol practice.

Here in the Eleventh Naval District, regular instruction is supplemented by special lectures and demonstrations at the Griffith Park Planetarium where not only can the movement of the sun, stars and planets be watched but all the celestial coördinates which are so mystifying to beginners are projected on the sky. Thus terms and nomenclature which seem unreal can be easily understood.

Of course, patrolling harbors, rivers and exposed waters, searching for saboteurs, spies and enemy activity of all kinds, is the principal active duty of the Auxiliary. Anything suspicious is promptly checked and reported to Coast Guard headquarters. Many unusual and unexpected jobs are performed. In Santa Monica, Venice and near-by beach cities, the Auxiliary mans the piers and checks the identification cards and permits of everyone who goes out on the commercial sport fishing boats, often handling from 500 to 600 persons daily.

In the Third Naval District, Auxiliary units salvaged two warplanes, saved two from piling up on the rocks and assisted in the salvage of a third. The saving to the Government was several hundred thousand dollars, yet the cost was practically nothing.

Impressive mass maneuvers have been conducted by several divisions. In the Eleventh District, over a summer week-end, a cruise was held by the Balboa and the Los Angeles flotillas, leaving their respective ports Saturday morning for the Isthmus at Santa Catalina Island.

Over 100 boats and approximately 400 uniformed Auxiliarymen cleared the two ports in less than 30 minutes. It was an impressive sight for the reviewing Coast Guard Officers. Highly instructive talks were held at the Isthmus; Sunday afternoon all boats returned home in well maintained formation. Other educational tasks of a similar nature are now being planned for each of the nine divisions of the Auxiliary of the Eleventh District.

Members of the South Shore Division of the Third District gave an excellent demonstration of mustering quickly and in force when called in an unscheduled emergency rescue mobilization. Telephone mobilization at 1100 brought close to 200 Auxiliarymen, manning nearly 100 boats, to designated meeting places. Promptly at 1400, the fleet, in two sections, started to carry out the maneuver. The doctors who reported for duty were divided between base points and vessels that flew the Red Cross flag. Blocks of wood, simulating survivors, had been dropped offshore about an hour before the work started. A considerable number of these blocks were "rescued." All doubtless would have been had it not been for a stiff southerthly wind and choppy seas that came up suddenly.

An important yet thankless job of the Auxiliary in its nightly patrols is checking blackouts. When lights in forbidden localities are noted or unprecedented glow appears in the otherwise inky sky, report is made to Coast Guard and police authorities and investigation follows.

An accomplishment of Flotilla 22 of the Eleventh Naval District was the raising of several thousand dollars with which a recreation hut was built at the local Coast Guard base. Tables for ping pong, checkers, cards and a dart game were provided, together with books, magazines and a completely equipped restaurant counter where the ladies of the Bundles for Bluejackets served coffee, hot chocolate, doughnuts, and cigarettes.

Though the Coast Guard Auxiliary is a civilian organization, Congress finally realized the military activities in which it perforce takes part and, on June 6th, 1942, amended the Coast Guard & Reserve Act of 1941 to permit Auxiliarymen to obtain commissions and ratings in the Temporary Coast Guard Reserve, under certain conditions. This amendment permits members of the Auxiliary to enroll as officers and members of the crew — without pay and without regard to age — in any motor boat or yacht placed at the disposal of the Coast Guard, and to wear the regular Coast Guard uniform of their rank or rate while on duty. Thus Joe Doakes, Captain of a Division, may wear the uniform of a Senior Lieutenant during the 24 hours he is on active patrol, and have all the perquisites of his rank (except pay), but for the rest of the week he is just plain Joe Doakes, attending to his law practice.

There were several good reasons for this revision of the original act. In the first place, as a purely civilian organization, the Auxiliary had no authority to exercise certain necessary functions. Again, it was desirable to draw upon a large body of experienced yachtsmen who, for various reasons, could not devote all their time to Coast Guard activities. Part time commissions and ratings for limited volunteer service enable many of these men to give their services.

This new law does not change the basic structure of the organization, for Auxiliarymen in Auxiliary uniforms still do the major patrol work, but one man aboard each boat must be a Reserve officer or a regular petty officer. On offshore patrols, all members of the crew must be Reservists or Coast Guard regulars.

In concluding this brief survey of the organization and activities of the Coast Guard Auxiliary, let me say a few words regarding the Auxiliary's place as a stepping stone to the active services. If a man wants to be a line officer in the Coast Guard and go to sea in a responsible position, he must pass a stiff examination in navigation, seamanship and general information. If he is content to be a "specialist" and take one of the many shore jobs, the process is somewhat simpler. But the Coast Guard is, relatively speaking, a small organization and highly selective. It is true that the Coast Guard gives preferred consideration to men from the Auxiliary but, nevertheless, many a good Auxiliary member is disappointed when the Coast Guard turns him down for the rank or rating he believes he should have.

I suggest that those who feel they are qualified look into opportunities in the Navy and in the Army Engineer Amphibian Command. Training in the Auxiliary, with its emphasis on small boat handling, makes the best possible preparation for some of the newer branches of the Navy and for the Amphibian Command. Many "graduates" of the Auxiliary already have commissions in these two services, and the opportunities seem to be increasing.

To those men who, for one reason or another, do not become officers, I quote the following from a Coast Guard officer: "Remember this. In order to do any type of duty we must have (a) boats, (b) men to crew those boats, (c) not just men but well trained men; specialists — that in itself gives reason for the Auxiliary. Develop photographers, signalmen; give your men basic first aid training. You and your officers must take the initiative; all men can't be officers but have them remember that, in an emergency, a well trained seaman may be just as valuable to the Coast Guard as any gold braided so and so alive."

To those of us who, in a somewhat befuddled state of mind, reported for duty on the afternoon of December 8th, 1941, the metamorphosis of the Coast Guard Auxiliary seems almost unbelievable. Then, it was a small, new organization, in which neither its own members nor the Coast Guard had much confidence. Today, after ten months of war, the Auxiliary is a powerful part of the nation's defense, sure of its own ability to do the job and holding the confidence and respect of the Coast Guard and of the Navy.

KEEP 'EM RUNNING!

(Continued from page 38)

happened to tires may happen to batteries. Consider before you sell.

A Few More Suggestions on Laying Up

As replacement parts will be next to impossible to obtain during the war period, it's a wise idea to go to a little extra trouble to conserve what you have. The best way to preserve your ignition and starting system is to remove it from the boat. This means battery and voltage regulator, if you have one. Starting motor and generator, distributor or magneto and spark plugs — clean every part thoroughly and, with the exception of the battery, store in a dry place, preferably at home. After cleaning, it is a good idea to apply a light coat of oil over the housings of the generator, the starting motor and the distributor.

Remove the water pump and apply a light coating of grease; remove all hose connections, and the carburetor and the fuel pump. It is well to take these two home as it's amazing what damage will result from the dampness of a cold winter. A light coating of grease applied over the entire engine will more than pay dividends as will a forced spray of light oil in the cooling system.

Another trick is to fill the crankcase to overflowing with light cheap oil. The really expensive part of the engine is thus protected from dampness and corrosion and the oil can be easily drained off in the spring. There are two schools of thought here: One advocates draining the crankcase, as the oil may form gum deposit; the other school leaves the crankcase filled. I like leaving the crankcase filled as it is a simple matter to flush with light oil before making the final fresh fill in the spring. The main bearings are then submerged in oil and out of harm's way.

Last, but not least, drain the gasoline tank only when you are sure that it's nonrusting inside. If liable to rust, leave the gas in as the fumes will help fight corrosion. If you are undecided as to how to dispose of the drained gasoline, wire me collect and I'll make arrangements for you.

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EXACT NAVIGATION

(Continued from page 23)

engine speed up from 8 knots to maximum, I estimated this position should be reached at 10:35. In any case, I had determined to start circling at that time, widening the circle at each turn.

We had double lookouts posted, the third officer with one man on the starboard side of the bridge, and the other men forward and aft. I was on the port side of the bridge which enabled me to step inside the wheelhouse frequently to look at the clock. Suddenly, the third officer called to me that he heard voices calling from the starboard side. As I walked through the wheelhouse I glanced at the clock; the time was 10:33.

During the afternoon the life boats had been prepared for prompt and easy handling by removal of heavy water breakers, boxes of bread, sails, etc., so that no time was lost in getting a boat in the water. By this time, the wind had freshened from the westward and after the life boat left the side the sea became so confused and rough that I decided not to endanger the lives of the crew by trying to take the boat up and so left it adrift. It helped also to serve as a marker for the Coast Guard cutter searching next day for the bodies of the three men who had been lost during the afternoon.

The survivors had been supported only by life belts made of thin rubber reinforced with canvas strips and, after the long hours of immersion, the air was slowly escaping from them. As the weather was fast developing into the strongest gale we had had that winter, it is doubtful if they could have survived many hours longer.

Anyone experienced in practical navigation knows that a large element of good luck must necessarily figure in cases of this kind. In this instance, the navigation work was carried on exactly as it would be at any time while running for a lightship, buoy or point of land. Unfortunately, the captain of the *Cavalier* did not receive the credit due him for the knowledge and skill displayed in bringing the 25-ton flying boat, with only one of her four motors working, down on the water in such a position that it was possible to get all the people out of her before she went under.

MUTINY IN THE "AMISTAD"

(Continued from page 32)

change. He knew no word of any language except his own. And besides, by birth and in his own country, Bartu was a gentleman and an owner of slaves himself. He knew how to keep still, but humble and ingratiating gestures were something he still had to learn.

A hearty push from one of the seamen sent Cinque, and Grabeau with him, reeling toward the hatch, the manacles jerking at his wrists and gouging into the scars of old sores. But he had seen enough for the moment. The cook was listening to Banna. The evil-looking little mulatto turned and said something to the cabin boy. Then, a grin spreading over his sharp features, he spoke to the cowering negro.

The slaves were ironed for the night and, because it was beginning to rain again, the air ports were closed and the hatches covered.

Cinque and Grabeau were in the after part of the hold, where the chain that connected their neck irons was locked into an iron ringbolt in one of the ship's timbers. Cinque had examined that chain often. It was lighter, much lighter, than the one on the Portuguese slaver, and rusted as well.

Cinque was a strong man, quick and active. Though he lacked two or three inches of six feet in height, he was the tallest of the *Amistad* slaves, topping most of them by half a head. His physical superiority, with some quality of force and decision in his character, had given him already some title to leadership among the negroes. He had not been ill on the voyage to Cuba, as most of them had at some time or other, and his hard determination to escape some day and get back to Africa had burned in him without rest.

He felt sure that he could break that chain if he bent all his strength to the task. Once he was free of that, he and Banna between them could manage the wrist irons. He had thought of it often in the past three days. And he had looked longingly at a bundle of knives, stowed with some cordage and barrel staves, on the forward deck. They would make good weapons, those knives; there must be two dozen or more in the bundle. They had square steel handles and heavy blades meant for cutting sugar cane.

But what if he should break the chain and contrive to steal a knife. What then? He would be cornered in the end, and beaten half to death, and probably rubbed afterward with salt and vinegar. And all to no purpose that was yet visible to him. No, it would be better to wait until he was on land.

After the *Amistad's* forward hatch was covered, there was, as usual, a good deal of noise and confusion, talking and quarreling, while the slaves

U. S. NAVY OFFICIAL PHOTO

A man talks into a microphone

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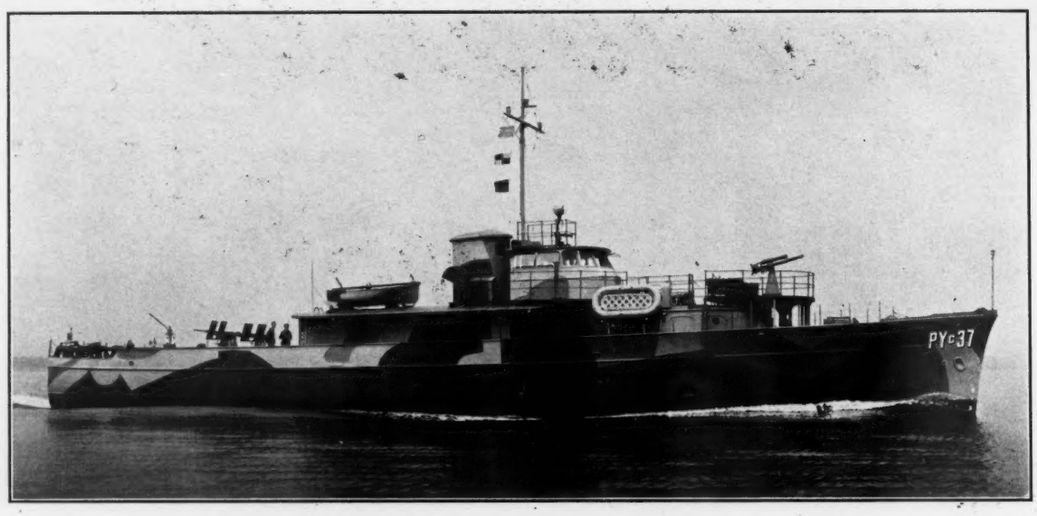

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settled themselves for the night. But a curious hush had fallen along the line of men behind Cinque. Most of them were sitting, as they had been used to do in the slaver, dovetailed together with each man's knees under the elbows of the man in front of him. It was easy to pass a message down the line. This time the noise and chatter had not started again afterward.

Cinque realized with a start what it must be — the message from Banna. The man directly behind him, Pi-e, a hunter whose hands were white with scars he had received from a bursting gun barrel, touched him on the shoulder.

"Cinque! Banna says we will land soon. He says they are going to eat us — all of us. That is what the cook has told him."

Now there was a rising surge of sound. Somewhere up the line a voice broke into a high, monotonous wail. Cinque was silent for a long moment, still as a figure carved in ebony, conscious of his breath whistling through his nostrils. He tried to tell himself that he had not heard the message properly. Pi-e was a Timmani, and his dialect difficult to understand. But he knew he had. He saw again the cruel grin on the face of the mulatto as he spoke to Banna.

He said to Grabeau, "They are going to eat us. Did you hear? Banna asked the cook and they are going to eat us when we land. Do you think it is true?"

Grabeau did not answer at once. He never answered anything at once, thinking over even light matters before he spoke. He was a little man, older than Cinque, and scarcely five feet tall, but quick as a flea on his feet.

"It could be," he said at last.

Neither of them knew much of the customs of white men. They had seen no men eaten at Lomboko. But then, Cinque himself had never eaten a man. Plenty of others had. There was one with them now, a man with hideously filed teeth, who belonged to a cannibal people. They called him Konnoma, because he came from the Konno country. It was impossible to understand much that he said.

CINQUE felt a tide of hot rage rising in him, sweeping away caution, shattering the control he had set over himself all these months. He stood up suddenly with a clash of chains. The unexpected tug on the neck iron dragged Pi-e to a half crouching position, pulled grave little Grabeau to his feet. Cinque took a turn of the chain around his right hand, braced himself solidly, and threw all his weight against the links fastened into the iron ringbolt. His muscles knotted, stood out in quivering cords. He felt the flesh of his hand swelling and pain crawled up his arm. Two of the links twisted a little, then one of them parted soundlessly.

Cinque was panting heavily. Sweat was running off his face, streaking his chest. His right hand was bleeding where the flesh was bruised and broken. He freed the twisted link and hauled the end of the chain out of his neck iron. He stood for a minute or two until he had got his breath back.

"If we are going to die," he said loudly, so that all those around could hear, "there are better ways than being eaten."

(To be continued)

UNDER THE LEE OF THE LONGBOAT

(Continued from page 44)

knowledge of intermediate details. So the ship got under way the next morning and helped escort a convoy to Iceland, arriving there without accident or incident. Dispatch orders yanked her back to Boston, unescorting and unescorted. When she arrived and her proud captain reported ashore, he was asked peremptorily if his name was indeed Carroll Emery Witherspoon. It was and he produced his orders to prove it. Well, sirs, a ghastly error had been made. In the Naval Reserve there was another recently inducted lieutenant commander whose name was identical to the lowliest letter. This other one was a graduate of the Naval Academy, had navigated and commanded ships and was ideally suited for captaincy of a PC on the Iceland route. But, because of a yeoman's blunder and the duplication of his name, he had been eating his heart out in an indoctrination school in the Middle West — where, forsooth, our hero should have been and almost immediately was. . . . Could happen.

I know it's none of my business and that there's nothing I can do about it, but I can't retain my self respect without letting go a blast at the animal cartoons that litter the advertisements in the family magazines. Zebras praising God knows what, alligators inviting you to buy leather and, worst of all, lady cows dressing for dinner, their dresses cut almost high enough to conceal the curve of their bosoms! It's udder nonsense (pardon my cold), and if advertising of this sort really appeals to America's buying public, I don't wonder that Hirohito thought we were ripe for a knockout.

ICE BOATS

(Continued from page 48)

there is a decided loss of speed. This, to my mind, is really the only characteristic of the speedy bow-steerer that cannot be matched by improved design in the stern-steerer. A cat rig with streamlined mast can be mounted on both types — and we saw the results last winter. A longer backbone in proportion to runner plank can be given to both types, and an immediate improvement in performance results. A non-twisting backbone, with proper driving position and controls, can be used on both types, and never fails to increase speed.

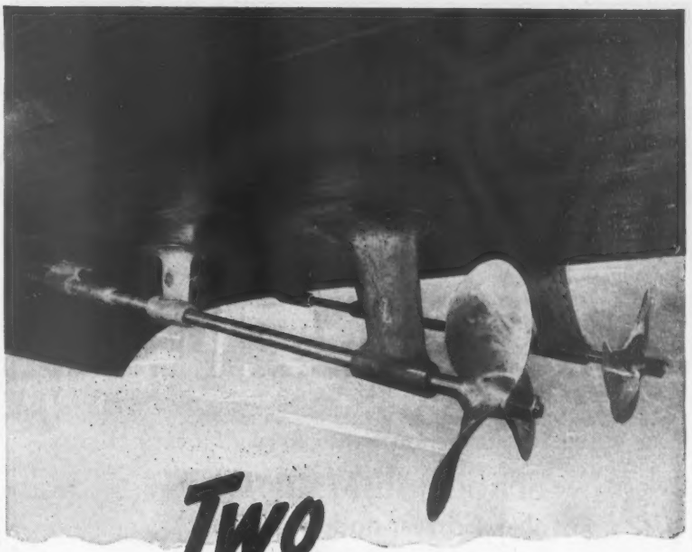
"Built-in" advantage brings up the next question in general design, the matter of weight. In lieu of a controversy, let us "look at the record" and draw what conclusions we can. The early Hudson River and Shrewsbury River boats were tremendous affairs, built with no thought of cutting down weight, wind resistance or anything else. The sole objective was to put together something strong enough to carry the biggest rig that money could buy. And, with the grossly inefficient rigs of that day, sail area did bear some direct relation to speed — simply because the smaller boats were so cluttered up with blocks, ropes and rigging that they had no speed at all. Hence the desire for bigger and bigger boats, and the necessity for plenty of "oak and iron" to keep them together. The plowed-field-like surfaces of ice often encountered on the Hudson may have had more than a little to do with this matter of size, also. A little boat just wouldn't stand that kind of going. The Buckhouts introduced hollow spars and hollow backbones, with a marked decrease in weight and an accompanying increase in speed. The conclusion was that less weight meant more speed; within limits, this is true.

But when we discovered dural for fittings, Sitka spruce for spars and hull, and the weight-saving possibilities of laminated construction, we really went overboard. Boats were built as light as possible and, since all were built that way, there was not much chance for difference of opinion. The fact that they might be *too* light never entered anybody's mind. That they couldn't carry their sail when it blew was accepted as inevitable because, by and large, they were exceedingly well-built boats and therefore succeeded in beating the best of the earlier crop. When the first Western bow-steerers appeared, they, too, were built as lightly as possible — and they were unquestionably fast.

In an effort to build a Western type bow-steering yacht to carry 150 to 175 square feet of sail, I copied as carefully as I could the construction methods used by the Western professional builders. Nevertheless, an innate sense of caution and a respect for the terrific forces brought to bear on an ice boat in a good breeze resulted in a boat that was a good 150 to 200 pounds heavier in the backbone than the boat of similar sail area that I had copied. The spars and fittings were also heavier, being solid rather than hollow, and steel in place of cast aluminum. The whole boat, including runners and sail, weighs 685 pounds. Her sail was as well cut as any, and she was as well streamlined as her prototype but, in the matter of weight alone, she was radically different. The results of several seasons of racing this boat have been amazing; she has been consistently faster both in heavy and light winds, on bad ice and good, than the boat from which she was copied, and has twice won the "Open" championship of all classes of the Eastern Ice Yachting Association.

In analyzing the comparison between this boat and those to which she had given away nothing but weight — that is, those which were her equal in sails, runners, streamlining and skippering — it was at once apparent that the greatest difference in weight distribution was in the backbone. Why, then, should a heavier backbone, other factors being equal, result in a faster boat? Consider for a moment what an ice boat in motion actually is. Her backbone is practically a projectile, propelled by her sail and borne on her springy runner plank. Recall your boyhood experiments with "spears" and "arrows" — essentially sticks which you tried to throw endwise as far as possible. Which went farther — the light or the heavy? And which held to their original direction the better? The answer to both questions is, of course: "The heavy one." If we make our projectile as light as a feather, it has no "heft"; it will stop the moment the driving force is removed because its momentum is practically nil. And this is precisely the behavior of light-backboned ice boats. They start fast, of course, but they stop just as fast.

"Ah!" you will say, "if they start faster, don't they thereby get ahead in the race?" And the answer is: "Yes — but they don't *stay* ahead." This may take a bit of explaining but it is a familiar experience to the ice boat skipper. The wind, unfortunately, is not a steady flow of air, constant in speed and direction. On our Eastern courses, in particular, it is more apt to be a tangled mass of swirling eddies, puffs and slack spots. Our light, quick-starting boat gets away quickly and builds up a nice lead — on the first few puffs. Meanwhile, the heavier boat has gotten a start on the first puff, another boost from the second, and her speed has picked up until she is running as fast as the light boat, but some distance astern. The very next



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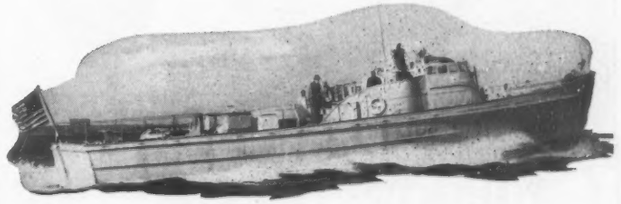

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soft spot encountered by the lighter boat will cause her to lose speed appreciably — but not so the heavy job. If her skipper is smart, and straps her sail as close inboard as he can get it, to cut down its resistance as she literally "coasts" through the slack air, she will pick up the next puff without any appreciable loss of speed. The momentum of that heavy backbone literally "punches" the boat through soft spots. It also "punches" her through snowdrifts, patches of rough or soft ice and other surface obstructions to speed.

For final conviction on this vital point, I ask the skeptic to sail a light boat and a heavier one on the same ice on the same day, and feel the difference for himself. I really think the proponents of extreme lightness forgot for a time that an ice boat is *not* an airplane. She travels over uneven, often rough, ice instead of through a gaseous fluid; she is propelled by the variable, shifty wind, not by a constant mechanical power plant. For both these conditions, she needs momentum. At any rate, the results seem to prove the point. The latest models of the famous 75-square foot Skeeters are not only nearly twice as long as the first ones — they are also more than twice as heavy. Again the record bears out the theory: the big, heavy-backboned Skeeters are so much faster than the little ones that they are actually raced as a separate division in the International Skeeter Association. And the important thing is not so much that they travel faster on any one puff, but that they achieve a far higher average or maintained speed.

Note that I have placed the emphasis where, by sheer accident, I placed the weight in my own boat, in the backbone. Weight in the runner plank is of no help, except as it may add slightly to stability. (Here *length* of plank will do more than *weight* to keep the boat's feet on the ice.) For the answer to the inevitable "How come?" I return you now to your childhood spears and arrows. How far did they go when you threw them sidewise? They had the same weight as when they were tossed end-first, but they just didn't get anywhere. The runner plank is nothing but a stick of wood being moved *sidewise* — and therefore having little or no helpful *momentum*, simply because of the position in which it is held. The same is true of the mast; the boom is too light to amount to much as a momentum-producer anyway — which eliminates everything but the backbone.

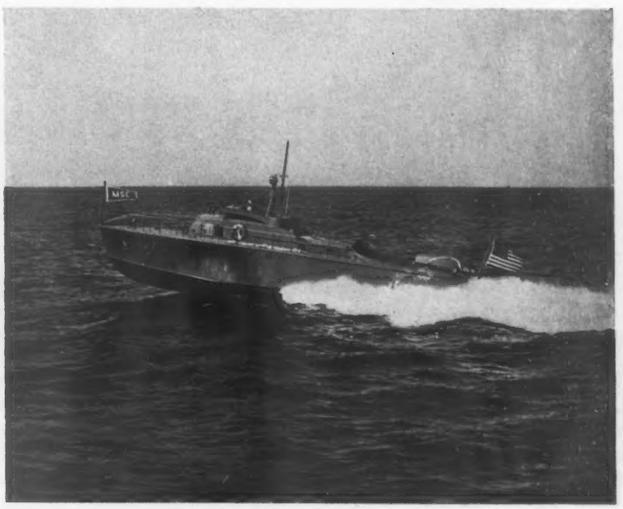
That a relatively heavy backbone, moving in the direction of its long axis, has far greater resistance to spinning than a lighter one, is another point that should not be overlooked while we are on this question of weight. Extra length is, of course, another major factor in spin-resistance, and the two together ought really to give a boat an appreciable edge in a contest.

We now have a few fundamental factors in mind which will help us to understand some of the other apparent paradoxes of ice boat design. Let us first consider the question of the superiority of large to small boats in the stern-steering ranks, a superiority which seems to run in the opposite direction as soon as the boat herself is turned around and becomes a bow-steerer. This is a fact borne out by experience but not obvious as to solution.

Considering the stern-steerer first, the chief difference between a big boat and a small one, assuming design to be good in both, is that the weight of the crew, placed far from the Center of Gravity, has little effect on the balance of the hull in a big boat simply because this weight is small in proportion to the weight of the boat proper. Hence, the C.G. of the combination of boat plus crew lies pretty close to the C.G. of the boat alone, which is up front, close to the main runners (C.L.R.) and to the C.E. of the sails. This close proximity of all the important centers of pressure and weight produces a well-balanced and manageable whole which should and does perform well.

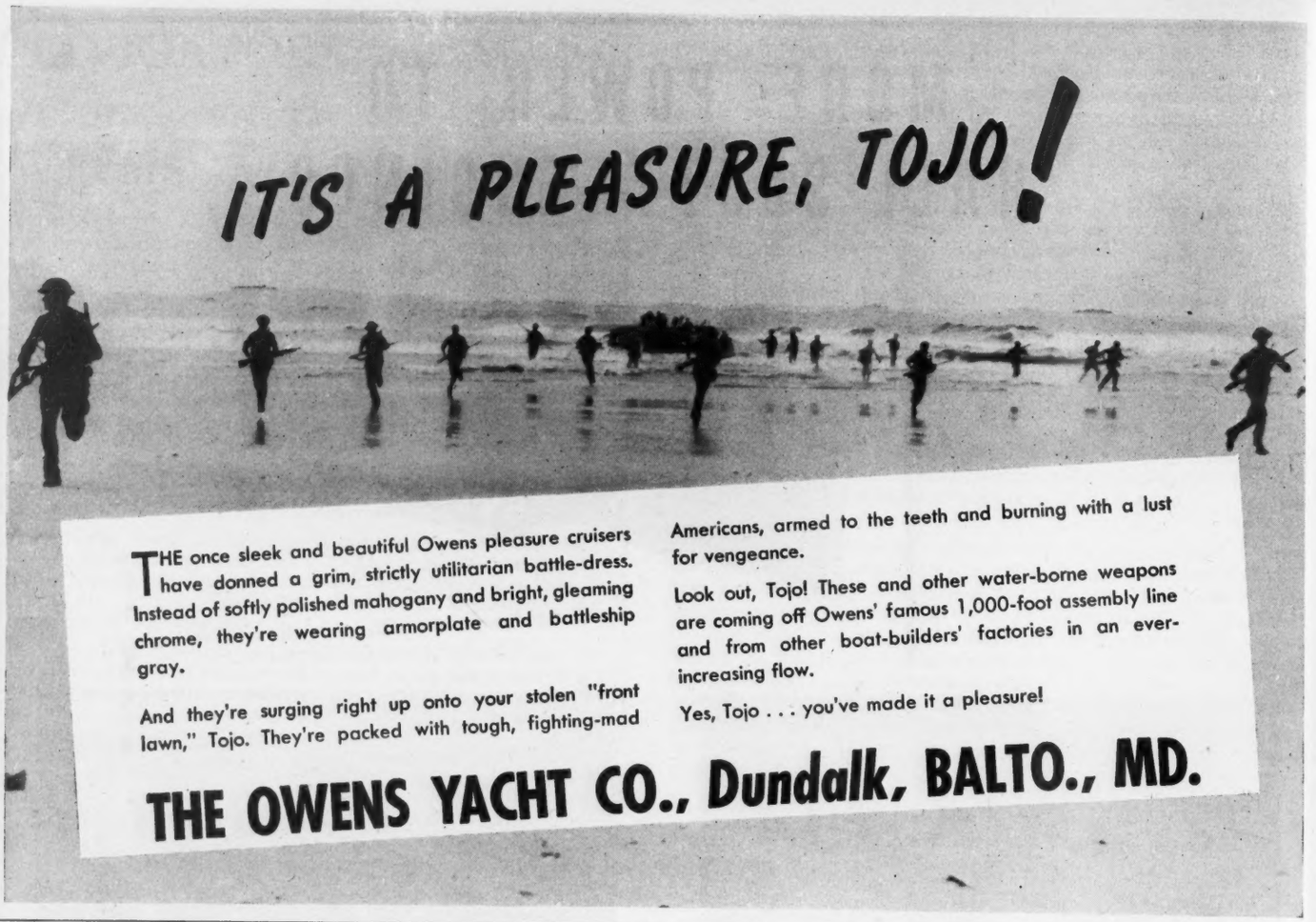
The contrast with the smaller stern-steerer is obvious. Here the crew may well weigh as much as the entire boat — but the crew's weight rides aft, over the rudder, while that of the boat rides (or should ride) forward, over the big runners. Thus we have two separate loads, several feet apart. Should one of these start to move sidewise (which is just what happens to the crew's weight when the boat is turning), it sets up a rotating movement which has nothing but the cutting edge of the rudder to resist it. On glassy smooth and hard ice, or with a rudder just a trifle dull, the stern will suddenly take charge and go off on a sidewise tangent of its own. Recent stern-steerer design in the smaller classes has partially solved this problem by the use of a far longer backbone, with the crew well forward of the rudder, and a remote-control type of steering gear rather than the older tiller. Naturally, this removal of the crew's weight from the vicinity of the rudder brings up a new problem, how to keep the rudder down, but the extra-long backbone has minimized the effects of the stern-lifting pressure of the mast. These boats behave much better and travel much faster than the older short ones that carried their crew directly over the steering blade. Nevertheless, there is no denying the fact that the stern-steerer is a combination of opposing and conflicting weights and forces which make her a cranky craft to design and an even more cranky one to handle. It is easy to understand why stern-steerer skippers spend hours in careful and painstaking tuning, with shifts of mast step and changes in rake of mast of as little as a quarter of an inch often making a real difference, not so much in *speed* as in *manageability*. In other words, a boat slightly "out of tune" will go fast

MORE POWER TO HALL-SCOTT ENGINES



Miami SHIPBUILDING CORPORATION heartily joins in the congratulations to the Hall-Scott Motor Car Company on the Occasion of the Army-Navy "E" Award. Their "Invaders" and "Defenders" are rightly named.

MIAMI SHIPBUILDING CORPORATION · MIAMI · FLORIDA


IT'S A PLEASURE, TOJO!
THE once sleek and beautiful Owens pleasure cruisers have donned a grim, strictly utilitarian battle-dress. Instead of softly polished mahogany and bright, gleaming chrome, they're wearing armorplate and battleship gray.
And they're surging right up onto your stolen "front lawn," Tojo. They're packed with tough, fighting-mad Americans, armed to the teeth and burning with a lust for vengeance.
Look out, Tojo! These and other water-borne weapons are coming off Owens' famous 1,000-foot assembly line and from other boat-builders' factories in an ever-increasing flow.
Yes, Tojo . . . you've made it a pleasure!
THE OWENS YACHT CO., Dundalk, BALTO., MD.

enough but she will get out of control at the slightest provocation.

With the bow-steerer, all centers of weight and pressure are in the same place, slightly forward of the runner plank. Here rides the crew; here is the C.G. of the boat herself; directly above this point is the C.E. of the sail; and here too is the C.L.R. (cutting edges of the main runners). Small wonder that she is fundamentally "under control" at all times, at least as far as horizontal spinning goes. Also, it is easy to see that the weight of the crew, falling directly at the same spot as the weight of the boat, has no opposing or counteracting effect whatever; hence the size and weight of the boat have nothing to do with the unity of forces when the crew is aboard.

"All right," say you, "but doesn't a larger boat, with larger sail area, travel faster in the same breeze than a small one with less canvas?" And the answer, true to this paradoxical sport, is "no." For a parallel, before we delve into the reason for this, I give you the airplane. Consider the size of the two extremes in airplane design: the huge bomber and the tiny fighter. Which is the faster? You may rest assured that if more size would give them greater speed, the fighters would be bigger. The fact is, of course, that at high speed the amount of lift produced by a tiny wing is ample to keep the plane aloft — and its skin friction and form resistance (called "drag") are major retarding forces in the picture. Hence, wings are just as small as they can be made and still give the plane practical take-off and landing speed. In other words, if flying fields were unlimited in size, the high-speed ships would no doubt "clip their wings" still further, and would take off and land at terrific speed.

The ice boat must make a smiliar compromise in design. Once up to speed, she, like the airplane, could easily dispense with part of her sail area and could thereby cut down retarding "drag." But how to get up to speed? Whereas the plane has the benefit of an artificial power plant, the ice boat has to have sufficient sail area to get going. Then, even though her skipper might like to shed part of it, she has to "carry on" with all those now-unwanted square feet of canvas creating drag and skin friction. Since skin friction and form-resistance of hull and spars increase as the square of the velocity, it would appear that the fastest ice boat would be the *smallest* boat — as to sail-area and form resistance — that carries enough sail to get up to speed.

When the wind is light, the larger boats carry enough sail to get them going, and speeds are not so great that skin friction and form resistance on hull and spars are major retarding factors. Hence, the big ones should — and do — win the races when the breeze is light. But, when it breezes up, the smallest racing class of all can — and does — show a clean pair of heels (and a taut, unflapping sail) to her bigger sisters *handicapped* by too much canvas. Even if they don smaller sails, they cannot hide their larger and bulkier hulls, or their taller masts, with resultant greater resistance, and the little ones gaily zip around and pass them with maddening consistency.

A most interesting case in point was this year's Open Championship of the Eastern Ice Yachting Association. (This race is a contest between the winning boats from each of six sail area classes, ranging from the 75-square feet "Skeeters" up to the 350-square feet Class A boats.) It started in a medium light breeze, which turned out to be only a temporary lull in a howling northwester that had made double reefs the order of the day. The big boat skippers shook out their reefs before the Open, feeling that the lightening of the breeze warranted the change. They started off in fine style, the three largest boats immediately walking away from the little fellows, with the Class C entry working out a nice lead on the windward leg and leading the "E" boat by nearly a half-lap at that point. And then the gale came back! All the boats started to go faster but the big ones were immediately in trouble; too much canvas. The only recourse was to luff, which they did, with a will, and managed to stay right side up. But what of the "E" boat? No luffing there! She started out after the leaders like a shot out of a gun. She caught and passed all but one — and the skipper of that one can speak with feeling when he says that it was a steadily losing fight.

And so we come to the end of this first powwow on ice boats, with a picture of the ice boat of the future gradually forming in our minds:

Rig: Cat (until someone works out a narrow, rigid jib that can be controlled by a mechanical device like a greenhouse window rig).

Type: Bow-steering (until the built-in contradictory forces of the stern-steerer can be eliminated by improved design or until the four-runner boat comes into her own).

Backbone: Long and relatively heavy.

Size: As small as possible, for strong winds — probably not over 175 square feet (Class C) in any case.

Shape of sail: Tall, narrow (2 to 1), and as smooth of surface texture as can possibly be obtained. Also, rigidly and stiffly arched into the proper airfoil curvature, either by full length battens in cloth sails, or by properties of the sail itself if we can get to metal or plywood sails.

(To be Continued)

Photograph, Courtesy of the Builders, Higgins Industries, Inc., New Orleans

These Higgins-Built ——★ Boats

ARE KERMATH POWERED • • • WITH SPEEDS A MILITARY SECRET • • •

THESE fast maneuvering, 70-ft. seagoing craft are on the job—in offensive and defensive action—serving the Armed Forces of Uncle Sam and those of our United Nations Allies in the fight to preserve the freedom of the Seven Seas.

The full story of their exceptional accomplishments cannot be told until after the war. Suffice it to say that these smartly designed, Higgins-built boats are giving a remarkable account of themselves as more and more of them slide from the ways with their four 500 h. p., V-12 Kermath Sea-Raider engines to insure "tops" in speed and dependable performance.

The illustration of the boat above necessarily shows it without deck armament and other military equipment. Bristling with weapons and off on sea duty, these fighting craft can be counted on as tough, rough and ready.

The kind of performance packed into their hulls is added evidence of Kermath's ability to produce engines that can "take it"—yes, and "dish it out", too. Here's still more evidence that those who know marine engines best can appreciate Kermath most.

★Due to essential censorship regulations, the uses to which these boats are put cannot be publicized.

KERMATH MANUFACTURING COMPANY
5565 COMMONWEALTH AVE. • DETROIT, MICHIGAN

GASOLINE AND DIESEL ENGINES **KERMATH** 25 TO 500 HORSEPOWER
A Kermath Always Runs

Thanks

HALL-SCOTT!

for Winning the Army-Navy "E"!

You and your employes are proud of it. We and our employes are prouder still of you, and others like you, for having won it!

This pennant, the highest honor it is possible to receive on the production front, symbolizes the determination of American industry and *the hard-working men in the shop* to do their share in backing up our fighting men.

The Candler-Hill Corporation has been glad of the privilege of contributing even a small *part* to your outstanding production accomplishment.

The Candler-Hill Corporation, manufacturer of the Titan fuel pump widely used in marine, aircraft, and other mechanized equipment, is devoted one hundred per cent to precision war production.

CANDLER-HILL CORPORATION
DETROIT, MICHIGAN

BRITAIN'S MOSQUITO NAVY

(Continued from page 19)

for this comparative reluctance to serve under the command of a "sub" does not, however, imply any lack of confidence in the young captain's skill or experience; the objection is purely a financial one.

The point is this: In a boat having only two officers, it would be odd if they did not mess together. But in a King's ship a lieutenant messes in the wardroom, whereas a sub-lieutenant lives in the gunroom. Hence, if the boat is commanded by a sub-lieutenant, the two officers live in what would then be styled the gunroom but, if the captain holds the rank of lieutenant or above, the officers' quarters would be glorified by the title of wardroom. So my Lords Commissioners for Executing the Office of Lord High Admiral of the United Kingdom, taking cognizance that the sub second in command is forced by the exigencies of the service to live "beyond his means" in the wardroom instead of in the gunroom, where the cost of living is supposed to be lower, generously ordain that he shall receive an extra monetary allowance that would not come his way if his captain had one ring less on his cuff!

\+ + +

A sub-lieutenant of the Royal Canadian Naval Volunteer Reserve was captain of an MGB which helped in the capture of a German "E" boat off Ymuiden, Holland, in the early morning of a cold March day. Three MGB's spotted the "E" boat, forced her to surrender and took her in tow. Then four more "E" boats hove in sight, bent on rescuing the prize. There was nothing to be done but to sink her, after taking the crew of ten prisoner. Then the fun with the newcomers began. When the fight was at its most furious, the engine room of the sub's MGB was put out of action, so the other two British boats made a smoke screen around her and prepared to take on a couple of the enemy apiece. Three of the Germans, however, concentrated their fire on the sub's "lame duck" and he was given a gruelling time before he drifted into a fog bank and got a chance to make temporary engine repairs. Before this, he had used up every round of ammunition!

Eventually, all three MGB's reached home, with ten German prisoners from the "E" boat they had sunk.

\+ + +

Three MGB's and two MTB's, all commanded by RNVR officers, were ordered to carry out an offensive patrol off the Belgian coast. They left their base soon after nightfall and set course for the southwestern end of their allotted patrol area. Visibility was good; it was a fine, clear July night with a moon roundly middle-aged. Far away to the southeast, the shadows of a group of high hung clouds were suddenly illuminated by the beam of a searchlight, a beam that came from the Belgian coast. Slowly, relentlessly, it traced its path across the sky until it was joined by a second beam, followed by a third, a fourth and a fifth and dozens more, until they interlaced from a horde of hidden centers. Evidently, the German flak gunners were expecting visitors.

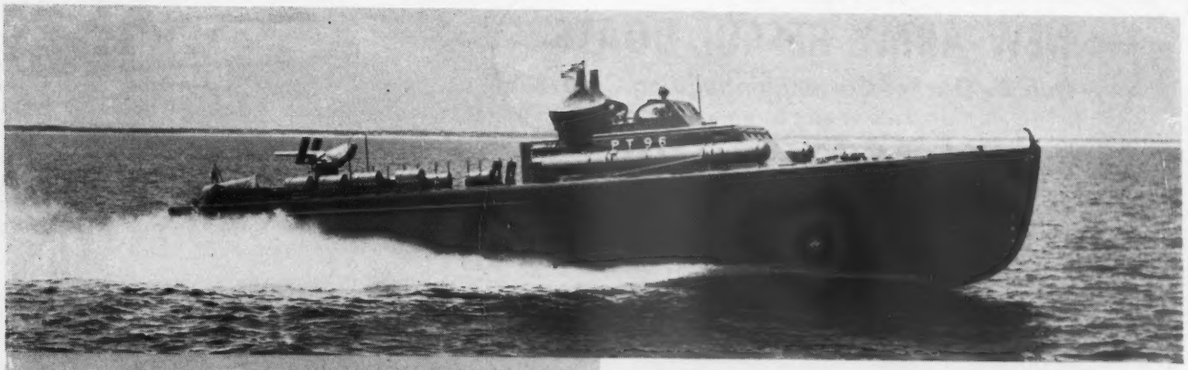
Whether the visitors arrived and how they fared is no concern of this story; the incident intrudes itself simply because the extra illumination provided by the searchlights' distant glow enabled keen eyes on board one of the MGB's to pick up, at long range, a momentary glimpse of a white bow wave. At once the flotilla altered course to investigate.

The telltale bow wave proved to belong to one of a group of three or four "E" boats — or possibly "R" boats, for the distance was too great to make certain — heading northeast. At 0042, action was joined at medium range, which shortened rapidly as the two fleets hurled themselves into the combat. Within a few moments, one of the enemy was on fire. Hits were scored on the other boats, too, and blows were taken as well as delivered.

Then, suddenly, in the midst of the clatter of battle and no more than three minutes after the lively fracas had begun, three more enemy vessels appeared on the scene.

The newcomers were a couple of heavily armed trawlers escorting a larger ship and they came into view from the northeast, a circumstance which seemed to indicate that a meeting with the "E" boats had been arranged. If so, the British had arrived at the rendezvous at what looked like a very awkward moment!

Heavily outnumbered and outgunned as they were, the MGB's engaged the new target without hesitation, and, while the MTB's maneuvered for favorable positions from which to discharge their torpedoes, they darted in like terriers to worry the enemy and keep him occupied. Two runs they made at the foe, peppering him with gunfire regardless of the plastering from the trawlers and the "E" boats. And then, as the MTB's had still not been able to secure a good vantage point, the Senior Officer's MGB ran in again at one of the trawlers. But the MGB was obliged, for the time being, to break off the battle, having sustained severe damage and suffered heavy casualties.



"Power Play"

More horsepower is concentrated in U. S. Navy motor torpedo boats than has ever been built into a "production" motorboat before. This is the one factor which permits them to dodge dive-bombers and actually shoot them down, to sink anything from a warship to a submarine. Nothing is too big for them to tackle, nothing fast enough to elude them.

The great power concentration in these hulls created a problem of terrific propeller stresses — successfully solved by Federal-Mogul wheel design and manufacture. Write us for suggestions on any marine propulsion problem.

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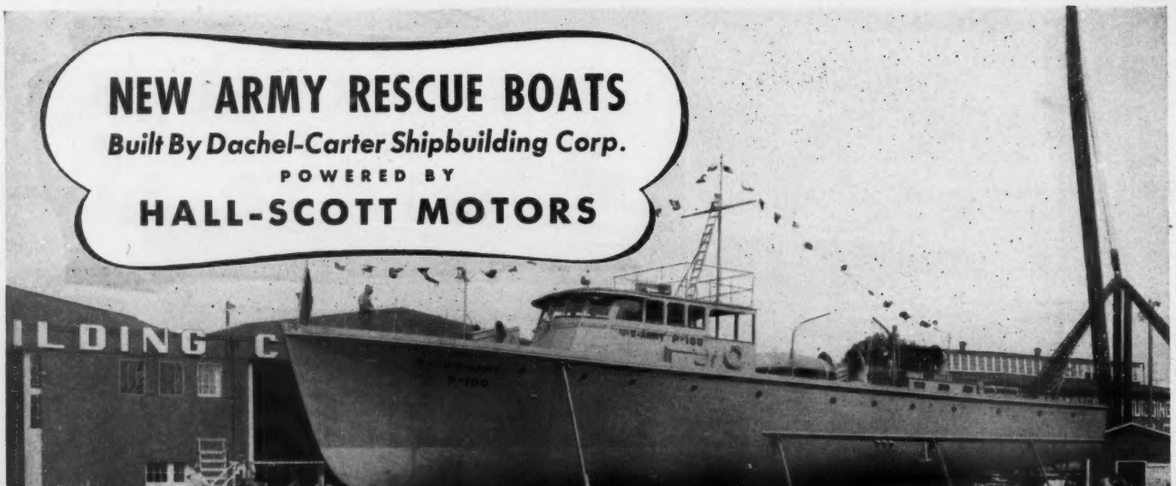
4036 Beaufait Ave. • Detroit, Michigan

Manufacturers of Standard and Custom-designed propellers from 8 inches to 9 feet diameter.

TOP to BOTTOM: U. S. Navy motor torpedo boats, built by Huckins, Higgins and Elco, powered by Packard, equipped with Federal-Mogul propellers. Official U. S. Navy Photos.



NEW ARMY RESCUE BOATS
Built By Dachel-Carter Shipbuilding Corp.
POWERED BY
HALL-SCOTT MOTORS

Congratulations HALL-SCOTT MOTOR CAR COMPANY
ON YOUR ARMY-NAVY "E" AWARD!

DACHEL-CARTER shares with HALL-SCOTT'S management and men their pride in this honor —because HALL-SCOTT motors are used to power DACHEL-CARTER boats. Now built for the armed services exclusively, DACHEL-CARTER boats will be equally deserving of the nation's confidence when built for the peace time fleets of tomorrow.

DACHEL-CARTER SHIPBUILDING CORP., Benton Harbor, Mich.

The MTB's were now ready to attack, however, and one of them launched a torpedo at the biggest of the enemy. There was a great flash amidships but it was not possible to say with certainty whether the vessel had received a fatal blow. To make sure of her prey, the MTB therefore tried to get into position for a second attack but was balked by the "E" boats. At the same time, the other MTB fired two torpedoes at another enemy vessel but was unable to observe the result, her captain being temporarily blinded by a shell hit on the bridge. She was struck several times after that, and her engines were temporarily put out of action.

By this time, however, one of the trawlers was seen to be lying on her beam ends and the largest of the ships was on fire and sinking rapidly. Of the "E" boat (or "R" boat) which was set on fire early in the action, there was nothing to be seen.

All five MGB's and MTB's emerged victorious from the encounter, the total British casualties amounting to one officer and one rating killed, two ratings seriously wounded and two officers and ten ratings slightly wounded.

\+ + +

And now, as these words are being written, news of the raid on Dieppe is coming in. Rumor is busy; nobody knows what is happening, save that this is not an invasion.

Representatives of all arms are in it, the Navy, the Army and the Air Force. To each one will belong a measure of credit; to none will belong the whole glory, nor will that be claimed. For:

"The Game is more than the players of the game
And the Ship is more than the crew."

But the little ships and the small crews of the Mosquito Navy will play their allotted part, whatever that may be.

Yes, they will back up their team.

HAULED FOR THE WINTER

(Continued from page 43)

determine that the stated coverage is adequate. But there always may be exceptions. Consider such a nightmare as this: A fire starts in the yard and the hull is burned to a crisp (which is bad enough), but the flames are checked before they reach the lockers and the mast and other gear are safe and unsinged. Well, you collect the insured value of the hull but you can't collect for the undamaged gear. Maybe you'll build a new hull around the stick; maybe you'll advertise it along with the rest of the equipment in the "Swap Chest." Maybe next time you'll leave the gear on board so that, if the hull is lost, the rest will go up in smoke at the same time.

THE proceeds from the sale of the gear might, however, come in handy to pay claims for damage to neighboring craft if the fire resulted from an explosion in your boat and it could be proved that you had been negligent. There is no clear cut ruling on the liability for such an accident, but it appears that, although the owner could collect under his policy for the loss of his boat, he himself would have to make good for the damage caused to others. The insurance companies are willing to assume this liability by endorsing the policy to include the Protection and Indemnity clause or one covering explosions. The latter is seldom written on small auxiliaries, which is some indication that owners of such craft can save the cost of this extra coverage without taking too great a chance. The Protection and Indemnity clause is also not urged by the brokers, yet many owners may find it a good investment because it provides insurance against personal injuries as well as against property damage. More will be said later about accidents to friends and others.

Continuing in this morbid realm of discourse, a state quite naturally provoked by thinking of all the things that can go wrong and who would pay for them, we come to another situation in which your pride and joy might cause damage to a neighboring craft. It does not happen often, but it does sometimes happen that a boat is not properly shored up and, as a result, topples over. In a crowded yard, she may, in falling, carry another boat down with her or cause damage to some lesser degree. For such an accident the insurance company foots the bill, and then probably tries to collect from the yard.

Generally, however, it is the owner who has to dig into his jeans for minor damage. Most policies — but not all — contain a "$25 deductible" clause. If the damage is less than $25, the insurance company is not liable; if it is more, that amount is deducted by the company from the total. This clause applies whether the boat is in, or out of, commission. However, even when the policy does not contain such an exemption, the owner cannot expect to collect for many of the small, aggravating losses caused by the yard's and/or the skipper's carelessness. The lay-up order, let's say, included directions for removing the battery and keeping up the charge in it.

Well, the yard man has a lapse of memory and, by the time the owner discovers it, the battery is wrecked. It seems obvious that, unless the yard is coöperative, it's up to the owner to buy a new battery but, according to the records, some owners believe that their insurance covers such a loss. It does not. Nor does it cover damage caused by the bursting of a pipe because the plumbing has not been properly drained. Ice damage of this type is not a risk undertaken by the insurance company.

But, if the policy provides that the yacht be left in wet storage and her water line is cut by ice, the bill for the damage is paid by the insurer. However, the danger of ice damage is great and companies do their best to discourage leaving small wooden boats in the water during the winter. Their most effective argument is the higher premium charged for wet storage. There is another argument which is equally convincing. If the boat were to sink and, upon raising her, it was found that the water had flooded in through a corroded valve, the owner would have to make good for the loss. The same rule holds true if a corroded valve causes a yacht to sink while in commission. The question of liability for such mishaps has been considered by the courts and they have upheld the insurance company's contention that it was not obligated to pay. Although the holding is well established, many owners are still happily ignorant of it. Better look to those valves.

Now we come to the question of liability for personal injuries to friends, strangers and workmen who step aboard the yacht. Your boat, let us presume, has been listed for sale, and a prospective buyer goes aboard to look her over. Well, if he breaks a leg because the companionway ladder is not in the place he expected to find it, or because the floor boards are up, you not only have lost a sale but you may also have a suit on your hands for damages. The "P and I" clause which has previously been mentioned affords protection to the owner against the financial consequences of such mishaps to guests and to regular members of the crew. It does not, however protect the owner against damage suits brought by persons working on the yacht who come within the provisions of the Federal Longshoremen's and Harbor Workers' Compensation Law.

Every yard carries insurance against accidents suffered by its employees. However, if you bring in a "specialist" of your own choosing, and he is injured, then payment for damages may be up to you. It appears to be an open question whether the man you hired to tune up the motor or the rigging would come within the scope of the "P and I" clause. Only a test case will settle the question. However, if you are not in an experimental mood and you want protection against such accidents, the insurance companies will provide it.

All the misfortunes that can befall a ship and plague her owner are well known to the underwriters from experience extending over hundreds of years. Because of this historical background, policies written on American yachts have, even when the possibilities of war seemed far away, disclaimed liability for losses resulting from "hostilities or war-like operations (whether there be a declaration of war or not)." Anyone's guess is as good as his neighbor's as to the likelihood of war damage to yachts hauled for the winter, or sailed during the season in the sounds, bays and other waterways where Uncle Sam permits pleasure craft to operate. However, if you want to play completely safe, you can obtain bombing insurance which is written by your broker under an arrangement with the government's War Damage Corporation. The rate is ¼ per cent with a minimum premium of $3 and the yacht is insured while she is on shore, or riding to her mooring. It does not apply while the yacht is under way. Whether or not you feel that such insurance is needed is as good an indication as any I know of your state of optimism on the course of the war.

SAN PEDRO TO KEY WEST IN WARTIME

(Continued from page 35)

to be cranky and would stop again and again after a few chugs. It was decided to get the big main up by hand as the breeze was freshening by the minute. That 68-foot boom and its hundreds of feet of halliards never looked so formidable as in that hour of toil by a short-handed crew. Seven men where fifteen or twenty was normal for the job. It was a time for concerted effort and frequent breathing spells, when your arms ached so that you could not rest them either hanging by your side or held up high. The skipper himself lent his strength to the job and it was like adding two more men. The throat and peak were finally jigged up, the sheet trimmed and we were sailing again.

Here was the best sailing of the entire voyage and the miles slipped by at better than 200 per day. The Caribbean gave us of its best — cobalt blue water, tropical clouds and a sun that made you feel that you had never really lived before. I swore that I would return to these waters after the war. Sterling and I practiced our semaphore, wigwagging nonsensical messages back and forth between quarterdeck and waist, or we took salt water

Blakeslee & Lane Photos

CGR 573

is one of the hundreds of Matthews Cruisers now on patrol duty. The skipper and one of the crew are shown (left) on duty during the night.

MATTHEWS
★ 34' · 38' · 46' · 50' ★
STOCK CRUISERS

Patrolling

DAY AND NIGHT

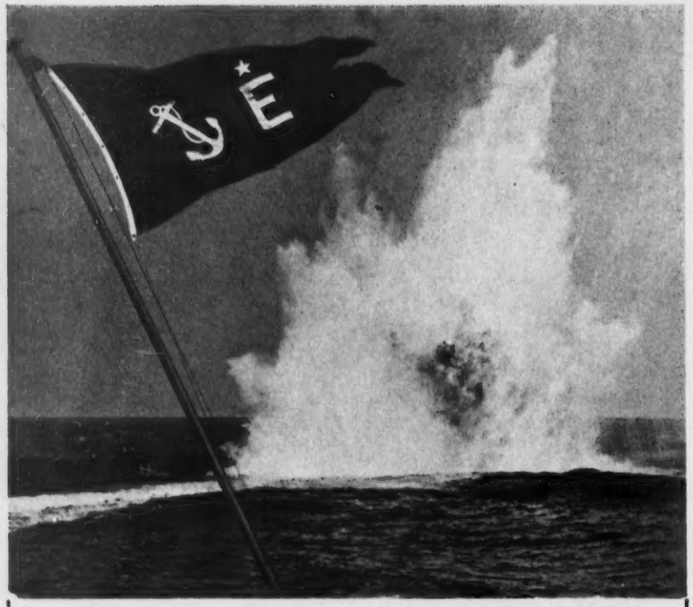
CONSTANT VIGILANCE day and night must be maintained by the Coast Guard Reserve. Vital harbors, important docks and wharves, strategic water front plants must be ceaselessly watched to guard against sabotage.

In this important work Matthews Cruisers are playing a leading part and the Matthews fleet is growing each week as more private boats are taken over.

In service of this kind a stout, husky hull is vital. That's the kind Matthews has been building for 52 years.

THE MATTHEWS CO.
314 BAYSIDE · PORT CLINTON, OHIO

"Wherever you cruise . . . you'll find a Matthews"



Wake of a Subchaser

SEVEN MONTHS AGO we were awarded the Navy "E" for excellence in the production of 110′ subchasers. Our "E" burgee now carries, as you see, a star, signifying ***continued*** production equal to or ahead of schedule. This leadership in our new work is emblematic of our fine organization and facilities. Not so many years ago we were privileged to build fine yachts, yachts that won races.

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JOES ***REVERSE and REDUCTION*** **GEARS**

Conserve to Win the War

U. S. Navy Motor Minesweepers YMS1 class and other Navy craft use Joes Reverse and Reduction Gears to conserve materials and prolong the life of power equipment. It pays the owner of diesel craft to practice the same economy by using a smaller engine of less weight with Joes Reverse and Reduction Gears.

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Joes R & R Gears on GM Diesel. Navy, Coast Guard

bucket baths, made this and that repair and enjoyed life in general.

One morning Sterling ordered the lifeboat made ready as we were due for the channel the next night. Joe, the cook, filled several gunny sacks with canned goods and I cleared the boat of an accumulation of odds and ends that shouldn't be in her, such as hatch covers, canvas, odd lines, buckets, spare lumber, etc. We made the spritsail next day out of some strips of spare canvas. The weather was hot off the "Banana Coast" and we sat in the shade of the bellying foresail. The mate superintended and we plied needle, palm and waxed thread throughout our watch. When, at last, the bolt rope was sewed on, it didn't look too bad, albeit dirty. After all, the canvas had once been relegated to its final service as chafing gear and had knocked about the bo's'n's locker for years.

THERE was a nice decision to make in the choice of personal belongings to take. It did not take much thought to rule out a suitcase but I did hate to leave my new gray flannel suit before I'd even broken it in. I resolved to use that as my getting away costume, under the imperative oilskins, instead of the dungarees.

The following morning would see us through the Yucatan Channel and into the infested waters of the Gulf. The channel is about 100 miles wide from Mexico to Cuba and one of the "U" boat packs lay just north. Another kept rendezvous with all comers just south of the Mississippi Delta with, no doubt, a shuttle between the two much like the Grand Central-Times Square subway shuttle. Another, more scattered one, was farther east, towards Florida.

To me, as I went below for some sleep at the end of the dog watch, it looked like suicide to try for New Orleans and I saw to it that my going-away costume was handy before stretching out. A few hours before, Sterling had said that he was debating whether to go to New Orleans or to Nassau, since, if he could not haul out at New Orleans (except at rates probably prohibitive), he would have to go to Nassau anyway and thus add several hundred miles to the voyage.

I fell into a fitful sleep and was awakened at midnight by a hand shaking my shoulder. It was the mate I saw as I turned on the light back of the dim-out screen I had tacked up around it. I went up on deck.

The engine was not running but we were bowling along at nine knots with a fresh breeze, on the starboard tack instead of the port tack as on the evening before. Scanning the sky, I made out the Southern Cross on the weather beam and Polaris to port. It could mean but one thing — we were heading for Nassau! The good news was verified by the mate, who told the watch to keep a lookout for an 18-mile light on Cuba to starboard. Now, if we could slip silently through the waters to Key West, we would be safe. We strained our eyes through the gloom and picked it up two hours later. Dawn broke soon after. We could then see, dimly, Cuba's peaks — and they were a welcome sight.

DURING the day, we reached for Key West. After passing two or three freighters nearly hull down to the east, we picked up the tower and smoke of the town about seven o'clock. The patrol boats came out to meet and identify us. We were given instructions how to enter the harbor and where to anchor. The skipper stood on the bowsprit and gave the steering orders, which we relayed aft to the helmsman, as he took bearings on the range lights, since night had fallen. We threaded our way under power and by nine o'clock had dropped the hook near the dim, ghostly shapes of several freighters at anchor. We were eight days out of Cristobal.

Next morning we were told that one of the freighters, *Domino*, had sunk a U boat a few days before by shell fire after sweeping the gun crew off the deck with a machine gun when she had surfaced near by. I felt proud of her and of her exploit and couldn't resist saluting as she slid out of the harbor to join a new convoy.

Toward evening, we left Key West on the last leg of the cruise. It was heart warming to see the jubilation of the crew as they neared their beloved Nassau again. The following night we picked up Great Isaac Light and then their good humor was irrepressible.

Bevans told of his wife's psychic powers. He said she would know he was coming home the next day and would tell the neighbors, as she always did when he was at sea. I kept my tongue in my cheek but decided to check the story for the sake of Science, but in the excitement of getting home myself I forgot to do so. The mate told me he knew where treasure was buried and, if I would sail down later, in my own boat, with a gold-finding machine, we could be rich. Boo was planning to get a job in a store, Mike would get his store teeth, and Lightbourne would see a clinic about those kidney pains. As for me, I had to get home fast because of the family, but I would return to the West Indies as soon as possible. And that's a promise!

At dawn, we let go the anchor in five fathoms of the crystal water of Nassau Harbor and watched it bite into the pure white sand bottom. It was the end of a wondrous voyage for me, but not the last one — I knew that. Boo rowed me ashore as Sterling and I exchanged farewells across the water. The *Spinney* lay there like a duck, knowing that her small wounds would be healed in a day or so and that she would be off again, this time with a cargo to carry and a part to play in this war.

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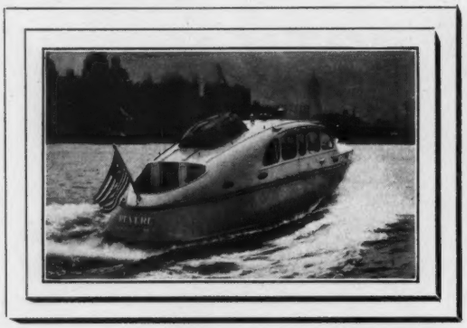
Remember this picture. Isn't it partly what we're fighting for?
"Revere", 45' all-metal express cruiser.



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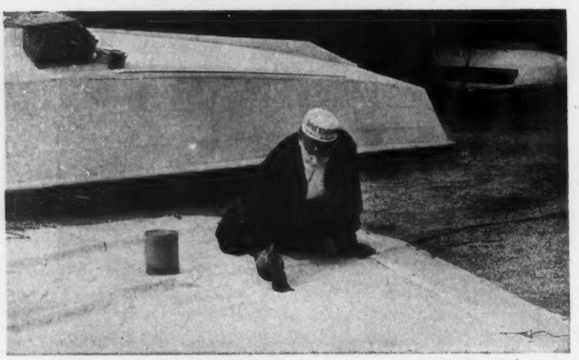

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AGENTS IN EVERY IMPORTANT PORT

WATERFRONT NEWS

(Continued from page 60)

The Baker School of Navigation. Commander Baker's school provides classes six days a week. Information may be obtained by writing the school, care of Hotel Astor, New York, or Hudson View Gardens, 183rd St. & Pinehurst Ave., New York.

New York Institute of Finance. Classes are held Monday and Thursday from 5:00 to 6:45 p.m., and are under the instruction of Captain Theodore Nelson, U.S.N.R. (Rtd.). Information may be obtained by writing Room 900, 20 Broad St., New York.

Hayden Planetarium. Classes are held on Tuesdays and Thursdays from 6:30 to 7:30 p.m. and from 7:30 to 8:30 p.m. A course in Star Identification is also available. Information may be obtained by writing Hayden Planetarium, 81st St. and Central Park West, New York.

Merchant Marine School of the Seaman's Church Institute. Aerial navigation is also on the curriculum, as well as many other nautical subjects. Information may be obtained by writing the school at 25 South St., New York.

Karl R. Weersma. Mr. Weersma is also available for private tutoring. Information may be obtained by writing Chester Gardens, G-2, 85 Chester Place, Englewood, N. J.

John Marshall College. Courses are available in marine piloting and dead reckoning as well as celestial navigation. Information may be obtained by writing John Marshall College, 40 Journal Square, Jersey City, N. J.

CHICAGO

Chicago Yacht Club. Classes are held each Friday evening at 7:30 p.m. at the Monroe Street club house. Information may be obtained by phoning C. L. Barkley at Wabash 4570.

Great Lakes Cruising Club. The club's Navigation School is now in its fourth year. Classes are held each Tuesday evening at 7:00 p.m., in Room 1552, Field Building, corner of Adams and LaSalle Sts. Information may be obtained by writing Warren Davis, 6 North Michigan Ave., Chicago, or the Director, Coast Guard Auxiliary, 610 South Canal St., Chicago, Ill.

BOOKS FOR THE STUDENT OF NAVIGATION

The following volumes have been selected by George W. Mixter. Any of these titles may be purchased through YACHTING's Book Department:

The Amateur Seaman, by H. S. Smith. $2.75
"Skipper" Smith has been there and knows his stuff.

Coastwise Navigator, by Capt. Warwick M. Thompkins. $2.00
A lot of sense.

Piloting, Seamanship and Small Boat Handling, by Charles F. Chapman. $2.50
Best for the beginner and contains a world of information useful to old hands.

Yacht Cruising, by Claud Worth. $7.50
Wise advice for deep-water cruising men.

Navigation, by George Hosmer. $2.50
Out of date but, on many subjects, remains the best of the small books.

Primer of Navigation, by George W. Mixter. $4.00
Begins at the beginning and carries through in a manner easy to absorb.

Avigation, by Harvey H. Holland. $2.50
A pleasant surprise among small books. Accurate, well illustrated.

Practical Air Navigation, Thoburn C. Lyon. (C.A.A. Bulletin No. 24) $1.00
One of the best known general works on the subject.

Modern Seamanship, by Austin M. Knight. $8.00
A ponderous book, but contains a lot of simple sense about navigation.

Navigation and Nautical Astronomy, by Benjamin Dutton. $3.00
The textbook used at Annapolis. Approach with caution, but is best for the mathematics of navigation.

American Practical Navigator, by Nathaniel Bowditch. (H.O. No. 9. 1938 Edition) $2.70
Far ahead of previous editions. Used for reference, it affords endless bits of information that can be understood by anybody.

Wrinkles in Practical Navigation, by S. T. S. Lecky. $12.00
Greatest of all, but only for those with some knowledge of celestial navigation.

▶ The editors of YACHTING will appreciate receiving information regarding other classes in navigation which are open to the public. Such information should be sent to Critchell Rimington, YACHTING, 205 East 42nd St., New York.

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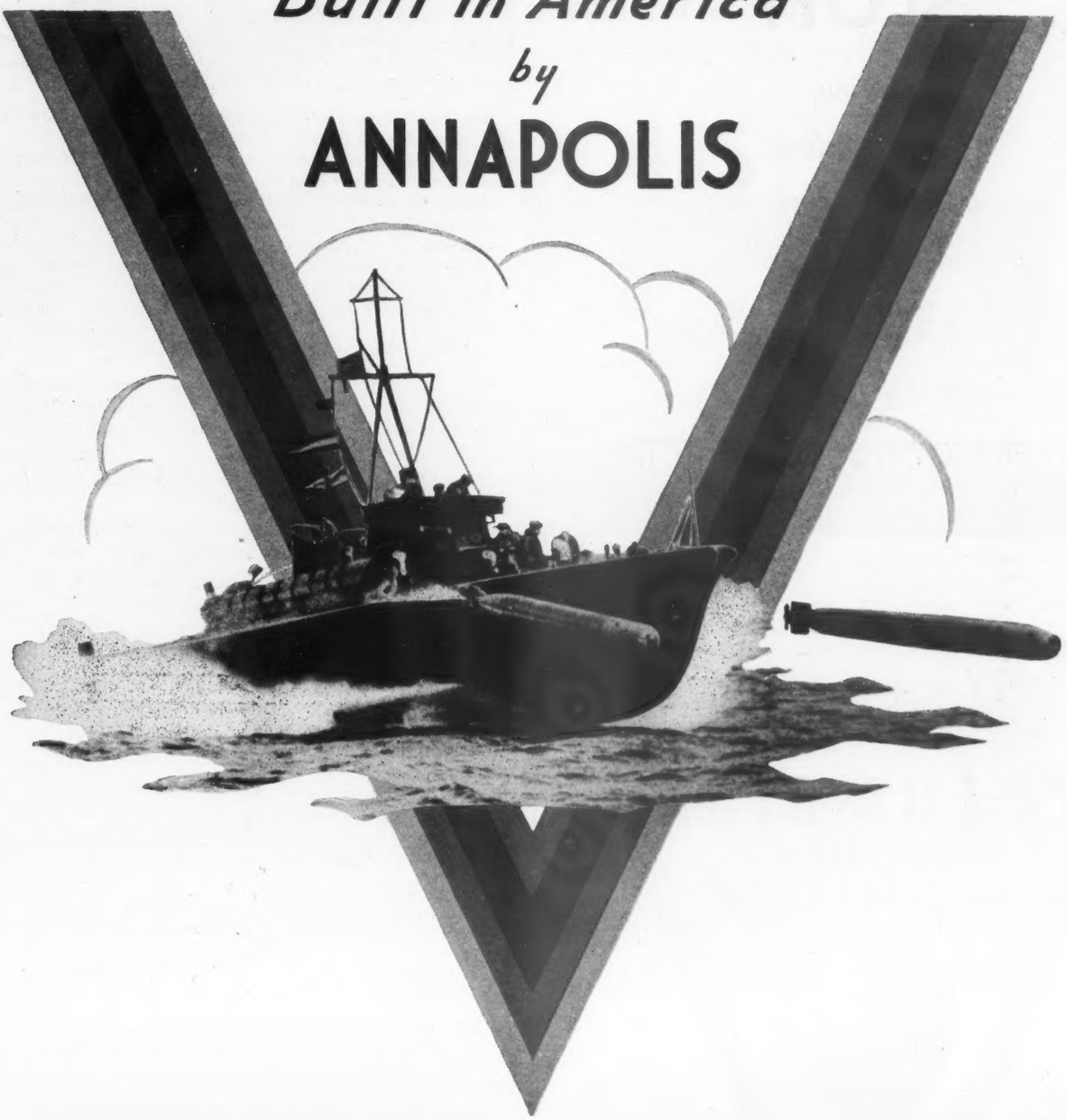

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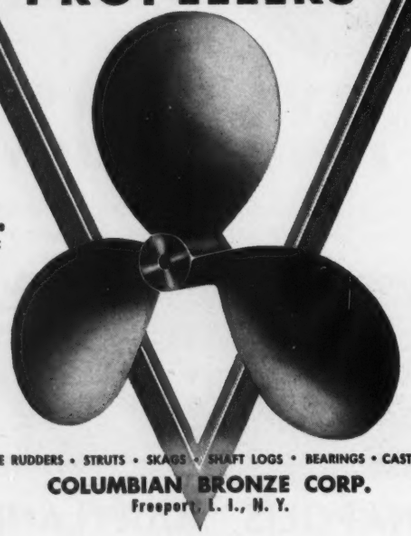

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WITH THE U. S. COAST GUARD AUXILIARY

(Continued from page 55)

The problem of fitting wartime activities to the C.G.A. organization is still occupying Washington and, under the expert guidance of Lt. J. H. Kimberley, Assistant Chief Director of the Auxiliary, there is every assurance that the present healthy progress of this vital branch of the Coast Guard will continue. Recent tabulations show that the total personnel is now in excess of 18,000 men, while the number of C.G.A. vessels approximates 13,000.

Of particular interest is the plan of establishing C.G.A. medical groups, composed of member physicians and surgeons, which has been developed in numerous districts. Flotilla officers who are interested in such a plan are advised to contact the Director of their District office.

The Third Naval District's publication "Over The Bow" explains the procedure which a member of the C.G.A. is to follow when desiring to purchase essential equipment which is on priority. It states that when it is necessary to obtain an item which requires a priority rating, the owner will submit to the Director, Coast Guard Auxiliary, *via* his Flotilla Commander, a written request for the item, giving the name of the item, the dealer from whom it is to be purchased, the cost and date of delivery. The Flotilla Commander will indicate by indorsement whether the service of the vessel is of real value to the Coast Guard. If the request is approved by the Flotilla Commander, the owner will receive a purchase order for the item, marked "No cost to Government." The owner may then obtain the needed item from the dealer by presenting the purchase order.

"Soundings," the excellent publication of the Sixth District, publishes an item of interest to Auxiliary members everywhere. One is a listing of those books which are highly recommended in official circles as aids to class or individual study. It is as follows:

Bluejackets' Manual	U. S. Naval Institute Annapolis, Md.	$0.90 list less 10% postpaid to Auxiliary
Piloting, Seamanship & Small Boat Handling	Motor Boating, 570 Madison Ave., N. Y.	$2.50 list less 33⅓% for 6 or more
Lovette's Naval Customs Traditions & Usage	Coast Guard Institute, New London, Conn.	$2.50
Dutton's Navigation & Nautical Astronomy	Coast Guard Institute, New London, Conn.	$1.75
Farwell's Rules of the Nautical Road	Coast Guard Institute, New London, Conn.	$2.00
Watch Officer's Guide	Coast Guard Institute, New London, Conn.	$1.25

Another helpful list of educational material appears in the Chicago District's "Scuttle Boat." An article on the subject points out that a variety of correspondence courses have been made available to personnel of the Coast Guard Auxiliary by the Coast Guard Institute at New London, Conn. They are:

Outline Course in Navigation, Piloting, Part II	$1.00
Outline Course in Navigation, Nautical Astronomy	$1.00
Navigator	No Charge
Senior Navigator	No Charge
Law Enforcement	No Charge

For students who are in need of a review in mathematics before attempting the Navigation Course, the following course is offered:

Preparatory Mathematics (Breneman)	$1.40

The following may also be purchased from the Institute.

Knight's Modern Seamanship	$4.79	*H.O.127 — Star Identification Table*	$1.15
H.O.87 — International Code of Signals	1.70	*H.O.71 — Azimuth Tables*	1.15
Radio Aids to Navigation	.90	*Bowditch*	2.02
Tide Tables	.25	*Light List*	.35
American Nautical Almanac	.50	*Current Tables*	.15
Piloting Questionnaire	1.00	*Nautical Astronomy Questionnaire*	1.00
Service Etiquette and Courtesy	.50	*H.O.2102-B — H.O. Star Finder*	1.00
Industrial Mathematics	1.40		

If the truth were known (as perhaps it is), the great majority of C.G.A. members are more than a little mystified by the complexities of naval etiquette. The Thirteenth Naval District journal, "The Norwester," does a good job of clarifying the basic matters of salutes and titles:

Remember Miss America?

She willed a legacy to Uncle Sam

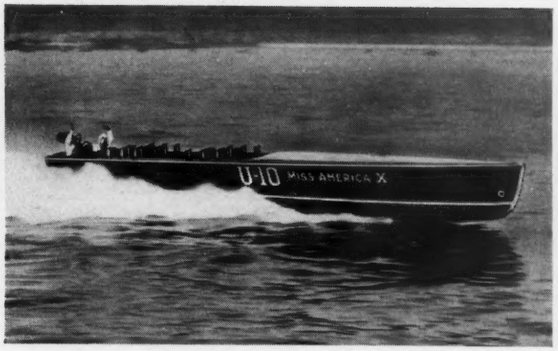
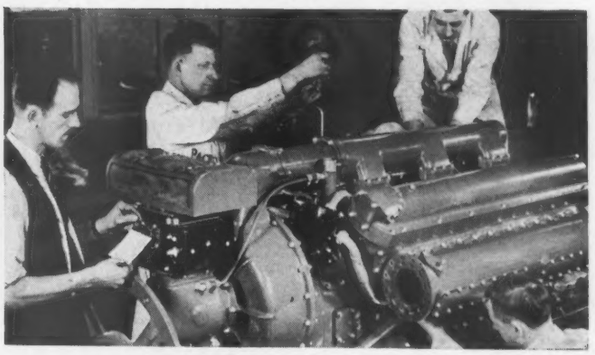


PHOTO M. ROSENFELD

1. This is Miss America X. She was the fastest thing on the seven seas. Powered by giant Packard engines, she captured the international speedboat trophy . . . showed the world how fast a speedboat can skim over blue water.



2. Here's where Uncle Sam enters the story. Over three years ago, when the U. S. Navy needed a super engine to power its newest weapon, the PT boat, they found Packard already had it. For Packard never stopped its research on aircraft-type marine engines—was ready to roll on a super-charged power plant made to order for these high-speed Navy craft.

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3. That's why Packard has powered PT boats from the start . . . why Packard was an old hand at war production long before Pearl Harbor . . . why these precision-built giants are being turned out in gratifying volume . . . why the Navy has awarded Packard its coveted "E," a flag which tells all who see it that the Navy says, "Well done."

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Packard war assignments call for precision production of the most exacting kind—marine engines for PT boats, and Rolls-Royce engines for aircraft. We're working exclusively on wartime production, but out of this precision experience, when the war is won, will come a better, finer Packard of the future. *ASK THE MAN WHO OWNS ONE*

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The hand salute is exchanged between officers and enlisted men when on shore and not in military formation or at work, on every occasion of their meeting, passing near or being addressed, the officer junior in rank or the enlisted person saluting first. The salute always should begin when at least six paces from the officer, the head and eyes turned toward the officer saluted and kept turned as long as the hand is raised. Auxiliary members are not required to render salutes. However, the courtesy may be extended among members of the flotilla. Salutes are not exchanged in buildings or public conveyances or when uncovered.

When reaching the quarterdeck of a government vessel from a gangway or from another boat, all officers and men salute the National Ensign. On Coast Guard Reserve and Temporary Reserve vessels, the practice has been to salute the National Ensign prior to boarding and on leaving, as the quarterdeck is defined to include any appropriate deck used for the proper conduct of ceremonial functions. After saluting the National Ensign on boarding, the officer of the deck is saluted. The same salutes are rendered, in inverse order, when leaving the vessel.

Officers with the rank of Commander and above are addressed by their titles. Officers of the rank of Lieutenant Commander and below are orally addressed as "Mister." When accompanying a senior, a junior always walks on the left. Officers enter automobiles and small boats in inverse order of rank and leave in order of rank. In other words, the senior enters an automobile or small boat last and leaves first.

It appears that the matter of winter uniforms has at long last been settled. In the course of a discussion of uniform details, the publication of the Fourth Naval District lists the district color allocations of coat and shirt shield insignia. No longer need one wonder why color blindness is a vital consideration in Coast Guard physical requirements!

Boston, *Harvard Crimson;* Cleveland, *National Flag Blue;* New York, *Irish Green;* St. Louis, *Dark Cardinal;* Philadelphia, *Autumn Brown;* San Juan, *Plum;* Norfolk, *Scarlet;* Los Angeles, *Indian Orange;* Charlestown, *Battle Green;* San Francisco, *Stone Blue;* Miami, *Sand;* Seattle, *Taupe;* New Orleans, *Old Blue;* Ketchikan, *Turquoise;* Chicago, *Royal Blue;* Hawaii, *Jade Green.*

PICTURES WANTED!

▶ YACHTING will be pleased to receive photographs, either amateur or professional, which illustrate various phases of C.G.A. activities. Such photographs should be released for publication by the District Public Relations Officer before submission. Descriptive copy and the name and address of the photographer should be included with all material submitted. Address Critchell Rimington, YACHTING, 205 East 42nd St., New York.

THE LOG OF THE "SARAH NEWMAN"

(Continued from page 42)

The next day all men were "orderly excepting John Roach at 7 hee came aft on the quarter deck where some others were at work and Commenced using disorderly Language using french languige during the night a quarter of Beef hanging on the misen stay had been Choped up or Cut up and Some hove overboard and Some hove about the decks I immediatty told him to keep quiet and to use no french languige on the quarter deck and taking hold of his Sholdier asked him what hee meant by heaving the meat overboard as Soon as I took hold of him hee immeadiatty took hold of mee *the mate* which came to a fight and after I thought hime Sufitiently Punished I went in to my room but he continued on the quarter deck using verry abusive and threatening languige I took a stick out that I use for a Caine and when I came out hee attacked mee with a nife I kept him off retreating to my cabbin hee making desperate plunges at my Breast on entering my Cabin I took my revolver and Pointed it and he kept back the Captain Coming out at the time had him immeadially put in irons and put below took his knif from him prisoner fed on Bread and Water." One rather wonders whether the mate was able to fight Roach so that he was "Sufitiently Punished," or whether the mate was beaten, went to his cabin for his stick, and then retreated again before Roach and his "knif." The mate seems to have been a pretty easy man, for he adds: "in the evening I went down below and asked John Roach iff hee was Comfortable his reply was that hee was all right and I left him for the night." The next day the captain and first mate, after talking to Roach, set him at liberty.

In the meantime, the steamer had tried to tow the *Newman* into the channel but the wind was so strong that the ship had been blown against the bank. At slack water she was kedged off and lay quietly at anchor for the night. She was towed down as far as Whosung and sailed on down to the lightship. On this day, February 9th, she dropped her pilot and was off on what proved to be a flying trip to Hong Kong, for she arrived there on the 13th. Her log records an average speed for the voyage of better than eight and one-half knots, which is sailing in any ship.

One of the New CASEY BOATS for 1943
WE'RE "IN THE ARMY" NOW
We're building 104′ Army Aircraft Rescue Boats as fast as we can. These fine Hall-Scott powered ships carry heavy gear to pick up sinking planes and surprisingly complete hospital facilities. They have displaced the famous CASEY auxiliaries in our building sheds, and into them is going the same skill and workmanship that has always enabled us to say of our yachts:
"CASEY BOATS ARE RARELY OFFERED FOR SALE — THEY SELL THEMSELVES"
CASEY BOAT BUILDING COMPANY, INC.
Fairhaven, Massachusetts

No sooner were they in Hong Kong than Roach got rum from shore and got drunk again. It is interesting to speculate as to what sort of a man Roach was. Here was a man who fought with the officers, even using a knife. He was a man who drank too much, for when a log calls a man "drunk," he was drunk. This calls to mind a conversation I once read in a book, between a captain and a mate on a ship in harbor on the Pacific coast of South America. The captain, pointing to a form lying in the scuppers, asked if the man was drunk. The mate replied that the man was not drunk, for he had just seen him move.

The *Newman* was to carry passengers (coolie laborers) and cargo over to California. This was before the days when immigration quotas protected our West from the so-called "yellow peril." The ship was cleaned and painted, and extra water casks and wood were taken on board. The carpenter was employed making one life boat, to take care of the 372 Chinese passengers! The crew planed the 'tweendecks, varnished, repaired sails, painted, scraped spars, and cut out five new sails. The "China Carpenters," in addition, put up berths but, despite these preparations, there was little promise of a pleasant passage for the crowded Chinamen.

The crew were allowed shore leave but only two could go at a time. They usually came back intoxicated. Then one pair, Bill and Scotty, went ashore and, to every one's surprise, came back sober and on time. Roach, of course, returned late from his liberty; after all that had happened, it seems surprising that he was allowed liberty at all. The cook went ashore for three hours and stayed until morning, waiting for the grocery stores to open, no doubt.

During this time, the *Newman* was loading a mixed cargo, consisting of 160 blocks of granite; "rise" totaling 1927 bags, 1841 mats, and 1000 bats; 800 bags of coffee; 483 bats of sugar (bundles of raw sugar weighing about 750 pounds), as well as 2063 packages and 14 bags; 161 packages of fire crackers; 44 baskets of dried (palm) cabbages; 59 baskets of ginger; 233 boxes of tea; 13 boxes of opium; and 122 packages and 7 boxes Mark K Y (probably initials of man for whom consignment was intended).

On March 28th, the ship was made ready for sea, for her lay days had expired. Two new seamen came aboard and Edward was brought back from the hospital, still too sick for duty. The rest of the cargo, including 9 bales of twine, 351 bundles of matting, 59 boxes of sago, 55 boxes of crackers, 35 baskets of cocoa, 3 boxes of silk, 1 box of ginger, 80 bales of gunny cloth, as well as more of all the kinds of cargo already mentioned, was brought on board. A day or so later, the *Newman* towed out into the outer roads and took all passengers and stores on board, consisting of sufficient food as well as 28,000 gallons of water and 50,000 pounds of wood, enough for the crossing to San Francisco.

One more passenger came on board, sent there by the consul who made the captain take him, although "hee would not give a Satisfactory account of himself and there is reason to think him a bad and desperate Character." The *Newman* was detained by the harbor master and doctor until more ample ventilation was arranged for. Without some sort of ventilation, it would have been unbearable for all those people crowded in the 'tween-decks. After getting the surveyor's certificate and clearing the ship, the captain and pilot came on board.

Her first day at sea, April 1st, 1863, the wind was light. Her passengers, however, were well and contented, no doubt pleased that the ocean should be so friendly. After twelve days at sea, a stowaway was discovered.

On May 2nd, it was discovered that the foremast was slightly sprung, so all studdingsail booms and blocks were sent down. Early the next day, large waterspouts were sighted. The passengers, no doubt, were frightened by the dragons for, according to an old Chinese superstition, waterspouts are dragons ascending to heaven in a column of clouds. There was enough wind, however, so that the officers knew that the ship was in no real danger.

The next day the *Newman* really stepped along under all sail, logging twelve and one-half and at times thirteen knots, the fastest speed recorded in the log. Her runs for the next few days are high: 197, 253 and 251 miles. Then, on the 7th and 8th, running dead before a strong gale, the ship turned in runs of 242 and 207 miles, making a total of 1150 miles in five days, an average of better than nine and one-half knots. Then, after three slower days, she again made good runs of 240, 215, and 241 miles. Those last two runs were both made on May 13th, for on that day the *Newman* crossed the 180th meridian, the international date line. Thus, in eleven days, counting the 13th as two days, the *Newman* had covered 2246 miles, a little greater than the distance from Los Angeles to Honolulu, and just over a day's run less than the distance from Halifax to Liverpool.

Our problem man, John Roach, was logged again: "I will here note concerning John Roach Since we left Hong Kong hee has been a verry good man in the ship until within about a week hee has got one of his old contrary fits Silent but agrivating I take as little notice as possible of him as it appears to me as though he wanted another row in the ship." A curious bit of by-play is recorded on the 16th, when the captain decided to stop

Building Champions

1942 Model!

Hubbard's South Coast Company has taken a great pride in the multitude of championship boats that have slid down our ways . . . but now we're prouder still of the ships we're building for the most important "Internationals" ever held . . . aircraft rescue boats and other craft for the Navy that are taking the water months ahead of schedule!

★ Due to the extensive facilities at Hubbard's we are also able to take care of practically all the hardware, servicing and repairing needs of the private boat owner. Write for full details.

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2202 Central, Newport Beach, Calif.

United States Navy Bureau of Ships "E" for production excellence awarded to Hubbard's South Coast Co.

Saving lives is our wartime job!

Thanks to the U. S. Maritime Commission and the U. S. Coast Guard every possible safeguard in equipment is provided brave American seamen who risk their lives to carry precious cargoes to our far-flung forces. Powered lifeboats enable quick, safer withdrawal from stricken ships. Powered lifeboats enable men to hold their own against wind and weather until help comes or land is reached.

Thus, saving lives has become the wartime job of Universal 100% Marine Motors, used on the lifeboats of Liberty ships and other American cargo vessels. Until Victory, this is the important job to which the Universal Motor Company is devoting its energies.

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The one test for every decision— **"Will It Help to Win the War?"**

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THE WORLD'S LARGEST BUILDERS OF 100% MARINE MOTORS

rationing out meat to the passengers, giving them rice and fish instead. The passengers did not like this and made such a fuss that the captain went back to the two pounds of meat per week, "as he could not perswade them that meat was verry injurious to their health there is Considerable of the mumps amongst them." I have no idea whether any connection between meat and mumps was intended.

Less than two weeks later, the coast of California was sighted, despite thick weather. The wind was light and baffling, so the *Newman*, in company with a schooner, was forced to tack offshore. Early in the next month (June, 1863), she reached San Francisco. With her safe arrival in that port, we end our detailed study of the log, pausing only long enough to outline briefly what the rest of the log has to tell. The *Newman* sailed from San Francisco to Port Ludlow, a city near Seattle, where a cargo of lumber was loaded. Then she sailed back to Shanghai. While in Shanghai, the boy Emir Saviour, who had been given liberty to go on shore, never returned. It is interesting to speculate on what may have happened to him — shanghaied, murdered and robbed, kidnapped, deserted, shipped on another ship, or what?

Our chronicler, the first mate, E. A. Pease, left the ship after being paid off. It is true that his grammar, spelling and punctuation were not good, but he did have a knack for conveying ideas in a few words. The account might well have been a dull affair if it had not been for him.

The log closes with the ship lying in Shanghai, with a skeleton crew aboard. Thus ends the log of the ship *Sarah Newman* — a tale of calms and gales, snow storms and waterspouts, deserters and stowaways, sickness, accidents, adventures and the everyday commonplaces that went to make up life in a square-rigger.

A SAILOR'S LAMENT

I'd left my ship in Sydney and been two months ashore,
And blown my money on women and drink as I'd often done before.
The 'arbour police they pinched me, and shoved me in the clink,
And told me I might ruminate on the evils of strong drink.

They keeps me there for seven days, and then they lets me go,
With my pockets full o' nothin', and my head all full of woe;
But, oh, my heart was achin' to be back to sea again;
To feel the decks a'rollin', to hear the wind, and rain.

So I makes my way down to the docks to see if there might be,
A chance of findin' some old craft nigh ready for the sea.
I wanders around an hour or two, a'playin' 'ide and seek,
And then I sees a clipper — the Blue Peter at 'er peak.

'Er masts and yards were shinin' white, 'er hull 'ad painted ports,
'Er bow and starn escutcheon work was bright with gold o'sorts,
'Er brass work was a'shinin', 'er riggin' sweet and taut,
'Er sheer was smooth and pretty, like a blinkin' racin' yacht.

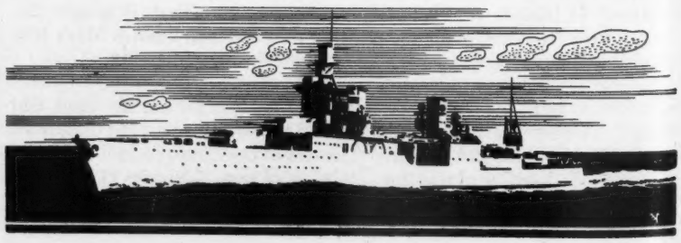
An angel was 'er figger 'ead, 'er arms across 'er breast,
And 'er lovely lips seemed sayin', "Come — and 'ave your rest.
The Southern seas will play with us; we'll romp around the Horn,
And I'll take you back to London town, the place where you was born."

I climbs aboard the main deck. The mate was holdin' school,
Teachin' a bunch o' stevedores 'ow to stow some bales o' wool.
I sez, "I've come aboard, Sir; 'ere is my discharge.
I've sailed in every kind 'o ship from a clipper to a barge."

The mate 'e looks me up and down. Sez he, "My lad, you'll do;
I'm short of just one good A.B. to fill my bloody crew."
So 'e signs me on. Up I goes on to the fo'c'sle head,
And whispers to the Angel, "Lass, I've done wot you 'ave said."

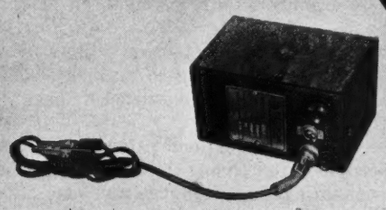
Oh, women and drink are the sailor's curse, that's wot the parsons preach;
They'll take 'is money and ruin 'is health and leave 'im broke on the beach.
But the truest friend a sailor 'as wherever he may roam,
Is a clipper ship, 'er white wings spread, a'racin' 'im back to 'is 'ome.

THOMAS YATES-SMITH



WE'RE KEEPING "Tough" COMPANY

. . . and we're PROUD of it!



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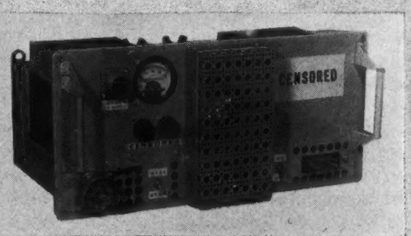
Input Voltage: 12 Volts
Output: 110 AC, 180 Cycles
Wattage Capacity: 30 Watts
Size: 4" x 4" x 6"
Weight: 3 lbs.
Efficiency: 75%



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Input: 12 Volts DC or 110 Volts AC.
Output: 2000 Volts DC at 200 Ma.
450 Volts DC at 70 Ma.
+250 Volts at 30 Ma.
−250 Volts at 25 Ma.
10 Volts AC 7 Amperes
Approximate output wattage, 500 watts
Weight: 56 lbs. Size: 19" x 11" x 8"
Efficiency: 65%
Regulation: 13%
Designed for continuous operation at full load

IN RETURNING TO ACTION, after recent refitting, *H.M.S. Illustrious* relies on newly installed ELECTRONIC equipment . . . not only for herself but for the planes that fly from her decks. Tough company? Yes! *Magnificently so!* But only *one* of *many* rugged military assignments for Electronic: Tanks! Walkie-Talkies! Mobile Amplifiers! Jeeps! P-T Boats! *Not a "softie" in the lot!*

BECAUSE IT TAKES TOUGH PRODUCTS to keep tough company, Electronic is justly proud of her wartime role. And *tomorrow* Electronic Power Supplies will return to peacetime pursuits . . . at *your* service . . . *tougher* and *better* in every way because of their combat experience. Until then . . . CARRY ON!

Electronic LABORATORIES, INC.

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The need for a modern shipyard on the south side of Long Island Sound was apparent three years ago. So, we chose Oyster Bay; and, with the background of many years' experience in Brooklyn, we planned and built this yard from scratch—to serve the yachting fraternity.

Pelican

TODAY, we cannot build fine pleasure boats—war construction is our all-important endeavor. Today, the erection of additional storage sheds is impossible—fenced and fire-protected outside space must serve many yachtsmen who would like their boats under cover. Today, we cannot offer all the many services we would like to render. But, in a tomorrow to come, all these will be realities.

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Oyster Bay, Long Island, New York

Yes, Fritzie, you'd better keep down when American defense patrol gets on your trail. Because in war, as in peace, American designers recognize that Paragon Gears are as dependable as the magnificent engines they control.

Year after year it's... **Paragon**
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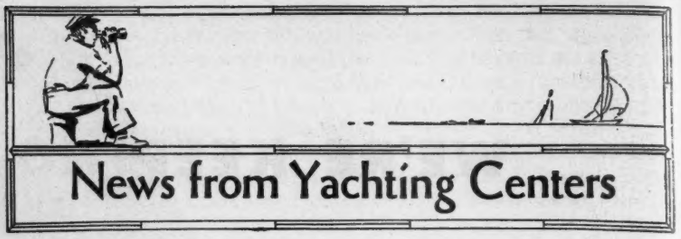

News from Yachting Centers

FROM SAN FRANCISCO BAY

By Jesse L. Carr

▶ With the strong channel breezes of San Francisco Bay softening into autumn zephyrs which sweep the cold fog of August off the surface of a bay waiting to be warmed by the autumn sun, yacht racing ended on San Francisco Bay for the 1942 season with the St. Francis Regatta. Seventy-two entries the first week and 80 entries the second week supplied, in spirit and competitive action, what the fleet missed in total number. Defense areas closed off many of the old and well-known racing courses during the year but there has been a growing appreciation of other portions of the Bay as racing grounds, as new courses have been plotted, tried and found satisfactory. Some of these will undoubtedly remain in use after the war is over. Two interesting features of the last regatta were the issuance of war savings bonds and stamps to the victors instead of trophies, and the fact that the winners of the combined two legs in this last regatta came surprisingly close to duplicating the list of season champions on Bay waters.

▶ The Porto de Oro Y.C. officially closed its social season with a cruise and barbecue, the latter held on the beach in the lee of Red Rock instead of the old-time location in Paradise Cove which is now restricted water.

▶ Richard Danforth, who invented, perfected and patented the famous Danforth anchor, has not raced his cutter *Gitana* this season but is interested at present in propagating a racing class of dinghies which are actually in use as yacht tenders. While dinghy racing has not been a popular sport on San Francisco Bay in the summer because of severe weather conditions, the available Lawley and Boston prams, with the El Torro fleet of the Richmond Y.C., may well serve for racing during the coming winter months and possibly supplant racing of larger craft next season, if this latter type of sport is restricted. The Danforth Anchor Co. now has five foundries working, producing anchors, chiefly 30-pounders, for the Navy Air Corps.

▶ Walter Armstrong has sold his cruiser *Wa-Me* after waiting for months to turn her over to the Coast Guard.

▶ Jimmy Michael, present owner of *Dorade* and now in the Navy, has been transferred to Miami. Among old yachtsmen, new in the Navy, are Victor Herbert, Lieutenant Harold Martinsen and Arthur Collbran, Jr.

▶ Martinolich Ship Repair has been awarded further government contracts for Army utility boats and has nearly completed a new yard adjacent to its old ways for construction of these craft. They are interesting adaptations of the able West Coast purse seiners and will be used for both patrol and transport.

▶ George W. Knears Boat Works have a number of wooden submarine chasers either under contract or construction and the Anderson and Christofani yards are busy on another group of Navy patrol boats.

▶ The Coxhead Shipyard, in Richmond, has nearly completed its assignment of ship tenders for the Navy.

▶ John Reader, skipper of Ray Melvin's *Chinook*, is an ensign in the Navy.

▶ Many local yachts, both sail and power, are being moved up the Sacramento and San Joaquin rivers for the duration while their owners are at war. Teredo navalis and most marine whiskers will not survive in the low salinity found above Carquinez Straits. Basins at Crockett, Martinez, Pittsburg, Antioch and Stockton are rapidly filling up.

▶ Casualties in the Berkeley and St. Francis regattas were minor but many. Bert William's Bear Boat *Goldie Locks* missed the Berkeley Regatta because of a dismasting but had a new mast stepped and ready for the St. Francis series. In the latter race, many spinnakers were lost and the Challenge Cup winner *Cyretta* lost both mainsail and jib. Marine Sergeant Barney Cogsdale, with his lady crew, lost a lady overboard and she fell deep into the Bay. Nearly all of the Golden Gate Class except the winner were embroiled in heroic efforts but eventually rescued the lady.

His ship has gone to sea . . .

Perhaps young America wonders at the changed conditions on our water fronts. The Chris-Craft many of their fathers planned on buying have gone to sea for duty with the Army, Navy, Coast Guard or Coast Guard Auxiliary.

When this titanic struggle is over and victory is ours, the sun will shine again on the seashores and waterways of America. New thousands will turn to Chris-Craft for rest, relaxation and recreation.

Today we proudly fly the Navy "E" for excellence in war production. Our experienced organization that has built and sold more motor boats than any other manufacturer in the world will be ready to serve you when this war is won.

Right now, you can best serve your government's need (and your own, too) by working for victory and buying bonds until it hurts. Every bond you buy brings America one step closer to victory, and brings you one step closer to a Chris-Craft when victory is won.

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For production "Well Done" we proudly fly the Army-Navy "E" at all three Chris-Craft Factories.

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A quarter of a century ago, the white wakes of fast, Greenport-built subchasers furrowed the seas. Today history repeats. Greenport again is building speed ships for war ▪ Pictured herewith is a Greenport-built crash boat constructed for the U. S. Army Air Corps and powered by reliable Hall-Scott Engines. It is with real pleasure that Greenport congratulates Hall-Scott upon being awarded the Navy E in official recognition of a job well done in producing splendid engines to SPEED THE SERVICES.

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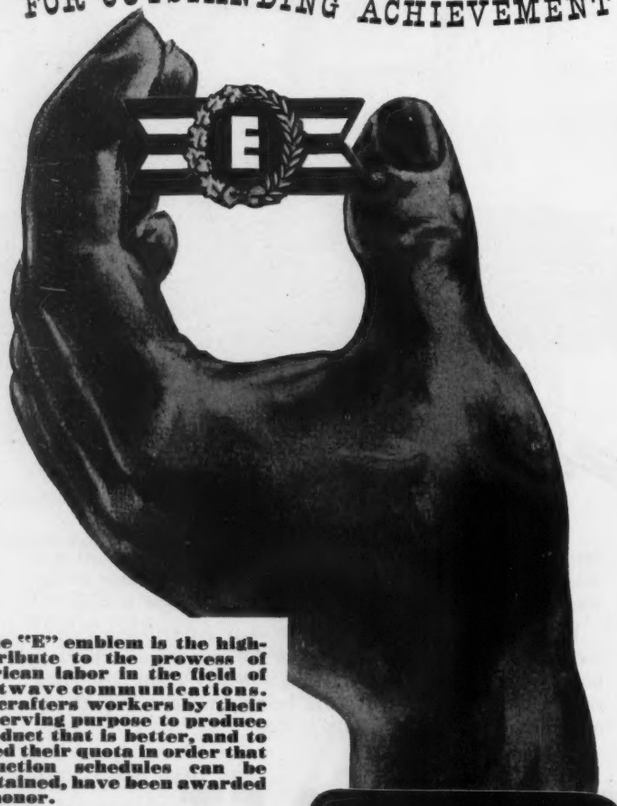
Greenport, Long Island, New York

FOR OUTSTANDING ACHIEVEMENT



... the "E" emblem is the highest tribute to the prowess of American labor in the field of shortwave communications. Hallicrafters workers by their unswerving purpose to produce a product that is better, and to exceed their quota in order that production schedules can be maintained, have been awarded this honor.

The accumulative electronic experience gained by Hallicrafters employees will be a dominant factor in future peace time production of advanced designs in shortwave communications receivers.

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CHICAGO U.S.A.
Keep Communications Open!

THE SOUTH SHORE OF LAKE ERIE

By John G. Robinson

▶ Charles S. Stewart, who served as 1942 chairman of the House Committee of the Mentor Harbor Y.C., was elected commodore of that club at the annual meeting, held October 4th. Commodore Stewart is, comparatively, a newcomer in Cleveland yachting circles but has exhibited marked ability in his work as committee chairman and has been rewarded with the highest honors the club can give. Commodore Stewart is a sailor, and a member of the Interlake fleet of the club.

Wm. C. Treuhaft, who was 1942 rear commodore, was elected vice commodore, and Warren Chase, chairman of the Harbor Committee, is the new rear commodore. Wilbur Prescott succeeds himself as secretary, with Larry Easley the new treasurer. Directors elected were: Wilson Smith, Wilbur Prescott and Thomas Jones.

▶ The Mentor Harbor Y.C. has the longest racing schedule of any of the South Shore clubs. At present, the auxiliaries are through for the year, club championship honors going to Dick Bostwick and his *Falcon II*, in Division I, and to Herb Bailey and his *Lady Luck* in Division II, but the smaller classes are still racing. Former Commodore James L. Myers won the first series for the Great Lakes "21's" after a tight battle with Hal Kneen, only three points separating the boats after six races. In the second series, however, Kneen has a good lead on points and seems likely to win. Hank Verbsky seems to have the Lightning Class series in the bag, but with the Interlakes and Snipes it's another story.

▶ At the Cleveland Y.C., they just managed to wind up the season's racing on the afternoon of Trophy Nite, October 3rd. Al Edgerton's *Robin* won the Class R club championship series through a consistent all-season performance. Ray St. John's *Doress*, which broke a spar in the first race of the series and missed several races because of that, took three straight firsts and a second in the last four races, to finish second in the series. Al Mastics took third place with *Vitesse*. Former Commodore Alex Winton took the Lipton Cup at the Mid-Summer Regatta with *Puffin*, and won three firsts at the Inter-Lake regatta at Put-in-Bay, but did very little racing in the club championship series.

▶ Don Bever, 17-year-old graduate of the Comet fleet, was the sensation of the Star fleet this season, taking the club championship and also the equalizer series, in addition to annexing the Johnson Trophy at the Mid-Summer Regatta. Gordon Beck won the fleet championship series and Art Hamer the Young Trophy. Niles Hammink was the Comet champion.

▶ Paul Gayman, of the Cleveland Y.C., who sold his Class Y sloop *Nimrod* a few weeks ago, chartered Lee Wilson's Class R sloop *Cotton Blossom* for the remainder of the season and perhaps for the duration, as Lee is working for Uncle Sam. Gayman sailed *Cotton Blossom* in the last race of the club championship series and came home a winner, quite an accomplishment in this crack fleet.

▶ Julius Simms, of the Cleveland Y.C., has sold his schooner *Jamie* to an Erie yachtsman and has taken, in part payment, a smaller auxiliary of the once-popular Mackinaw rig.

▶ J. E. Rice, of the Cleveland Y.C., has sold his 28′ Hacker runabout *Jo-Do* and has bought George D. Webber's fast 30-footer, one of the fastest boats in the Cleveland district.

▶ The Cleveland Yacht & Supply Co. has bought the entire stock of Boat Sales, Inc., including the propeller repair division. Sam Mintz, former owner of Boat Sales, Inc., retained his Richardson and Chrysler franchises, however.

▶ The youngest yacht club along the South Shore is the recently organized Westlake Y.C., of Rocky River. It is located just north of the Cleveland Y.C. and has leased the docks of the Westlake Hotel. Nickolas Poly, owner of the power cruiser *Poseidon*, is commodore, with Neil T. Sawdey, vice commodore; Earl H. Keefe, rear commodore; and Henry F. Kuchta, fleet captain. Temporary headquarters are in the Westlake Hotel. A marine railway, built originally by the Rocky River Dry Dock Co. during World War I, will be used by the members to haul out this fall. The new club has 50 members and approximately 40 boats.

▶ The White City Y.C., of Cleveland, is to have a new small boat harbor soon, though too late to be of much value this year. Dispossessed last spring, the White City owners moved in with the Edgewater Y.C. for the season. Work has been slowly going ahead on the new harbor, however, and it will be finished some time this fall.

That the Seas May be Free Again....

The great grey battlewagons and carriers steam proudly out to sea, secure in their might . . . secure behind their terrible fire-power and inches-thick armor . . . secure under an umbrella of protecting aircraft.

They are the ships that you see in the news-reels—being launched with pomp and ceremony—shown in breath-taking action!

But *they* don't land fighting men, tanks, guns and equipment on the beaches. *They* can't be spared for the small, but vitally important job of sweeping the seas free from mines. They can't dash out from shore to rescue a single pilot huddled in terrible hopelessness on his tiny rubber raft. They can't stop their surging progress to pick up a lifeboat full of pitifully burned and scalded men from a torpedoed tanker.

The backbone of the Navy AND the Army is the fleet of thousands upon thousands of "little motor boats" without whose help the sea-giants could not crush the enemy . . . the "little motor boats" that are streaming from boatyards that once produced sleek pleasure craft.

Together they're the team that will make the seas free again.

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These **BIRDS** *have changed our business*

YESTERDAY we were engaged in working on beautiful, sleek pleasure craft. Today, no thanks to Hirohito, Hitler and Mussolini, we are willingly engaged in the production of mine sweepers—boats that are going to do their share in writing "finis" to their world-conquering ambitions. When that's done, it's back to pleasure craft!

Stadium
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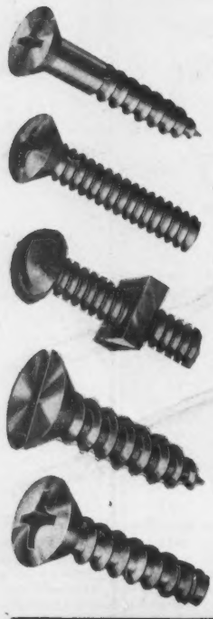
Extensive Research & Engineering Skill assure dependability of



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Long established laboratories enlarged with each plant expansion, completely equipped with the most modern facilities and directed by a skillful Engineering Staff assure every fastening user of rigid adherence to specifications to speed production — safely, smoothly and without interruption. Specify HOLTITE on your next fastening order.

CONTINENTAL SCREW CO. *Established 1904* New Bedford, Mass., U.S.A.

LONG ISLAND SOUNDINGS

By Starboard Tack

▶ The class standings of the 1942 season of the Yacht Racing Association of Long Island Sound are as follows:

INTERNATIONAL O. D. CLASS	Per cent
Yacht and Owner	
Myth, G. Esselborn	.822
Aileen, C. Shields	.731
Alberta, Albert Marx	.717
Feather, J. L. Merrill	.672
Patricia, A. P. Davis	.648
Frolic, M. Konow	.600
Mystic Jr., P. R. Mallory	.562
Susan, R. A. Mosbacher	.512
Peer Gynt, P. A. Lorentzen	.477
Imp, N. Onstad	.475
Elsalan, H. and E. Hanan	.431
Grilse, W. Roy Manny	.455
Freya, J. and J. Starkweather	.307
ATLANTIC CLASS	
Whim, John and MacKenzie	.853
Cruachan, Lois MacIntyre	.742
Rumour, Mills H. Husted	.660
Hound, Van W. Loomis	.648
Hera, Jay Lukens	.624
Sagola, G. R. Hinman	.566
Minkie II, C. H. Vanderlaan	.534
Glamour, B. S. Litchfield	.513
Ajax, J. W. Meader	.470
VICTORY CLASS	
Jimmie, L. M. Rakestraw	.762
Alouette, B. G. McNary	.730
Black Jack, R. W. Fraser	.582
First Call, Lingard Loud	.456
"S" CLASS	
Kandahar, P. S. Patton	.878
Felicity, R. H. McCullough	.628
Auley, W. S. Chesley, Jr.	.624
Nepenthe, H. L. Jamison	.600
Fidget, J. M. Halstead	.567
Penguin, W. A. Olsen	.550
Aurora, W. R. Townsend	.494
Charlotte, W. H. Baxter	.406
Woodcock, F. W. Schnirring	.337
SOUND INTERCLUB CLASS	
Lively Lady, R. P. Miller	.900
Heljak, John Nichols	.727
Rondine, Eleanor Hansen	.522

COASTWISE CRUISER CLASS	
Marrob II, Mrs. Marguerite Erskine	.863
Lucky Star, R. O. H. Hill	.720
WEEK-ENDER CLASS	
Erewhon II, Albert W. Fribourg	.951
Neap Tide, James S. Eyre	.733
HANDICAP CLASS, DIV. V	
Pecusa, Rev. H. C. Benjamin	.783
Murrelet, B. Fisher	.739
Rattlesnake, R. W. McCullough	.721
Valkyrie, S. E. Kay	.512
Aries, L. T. Webster	.405
HANDICAP CLASS, DIV. VI	
Cricket, William MacInnes	.818
Gadgette, Jack E. Chayne	.677
Gamin, A. D. Cameron	.592
HANDICAP CLASS, DIV. VII	
Taffy Too, Harry M. Wootten	.739
Skipper, S. G. Ellis	.719
Ripple, Dorothy Quortrup	.700
Sufi, R. M. Olinger	.550
STAR CLASS	
Rascal, F. E. Campbell	1.000
Bolt, R. Everdell	.768
Armade, A. M. Deacon	.737
Fiddler, D. H. Ogilvy	.513
Flying Colors, T. J. Druding	.500
Justa Star, S. Faile	.464
Jack Rabbit, O. MacPherson	.313
110 CLASS	
Jitter, J. B. Shethar	.769
Seadown, Heinz H. Koehler	.758
Hobby, Harry Herbert	.687
Faina, M. and W. Hornidge, Jr.	.643
Release, John P. Meade	.600
Ten to One, Donald Scholle	.516
Imp, H. and J. Flockhart	.277
SNIPE CLASS	
Can-Can, F. S. Cannon	.909
Wild Wind, William Kastor	.787
Rex, Donald Maroldy	.526
WEE SCOT CLASS	
Rumpy, Ernest Lane	.400

▶ The Cruising Club established another delightful precedent on the occasion of its Columbus Day week-end rendezvous in the form of a shore party at the home of Hobey Ford. A fleet of 21 boats, an impressive armada in these parlous times, anchored in the lee of Sheffield Island in Norwalk Harbor and was thrice blessed by the weather man. Mr. and Mrs. Ford played host to the skippers and their crews, whose ranks were added to by scores of members who arrived by car, bicycle, buggy and on foot. Beer by the keg, an oyster stew in a pot of gargantuan proportions, and other shore specialties were served to all. A couple of North Sea pianos, wielded by Lank Ford and Louise Seeley, enlightened the company with songs and chanties and, later in the afternoon, all hands reported to the various boats for gams and visiting. In spite of the war, both in numbers and in spirit, the rendezvous lived up to the traditions of the club. No less than a quarter of the club's members are in the armed forces, a representation of which they may well be proud.

▶ Ridsdale Ellis has been appointed Secretary-Paymaster of the Corinthians, and has established a new shore station for the organization at 233 Broadway, New York. A varied program for the winter season is planned.

▶ Although a majority of the Long Island, New York and Connecticut yacht clubs actually go "out of commission" each autumn, a surprisingly large number are planning to remain open — on either a full or part time basis — throughout the winter months. Among them are the City Island and the South Shore clubs. By so doing, they provide convenient meeting places for local Coast Guard Auxiliary flotillas in addition to being the scene of congenial gam sessions. (Other clubs please copy!)

▶ The Yachting Department of the New York Athletic Club has closed its main clubhouse on Travers Island but has scheduled an active and diversified winter program. Arrangements have been made with the nearby Davenport Club to extend the courtesy of its dining facilities to N.Y.A.C. members.

▶ The Long Island Sound season concluded on Columbus Day when Larchmont staged the final race of the James D. Sparkman Trophy series. Boisterous seas cut down the fleet and, when the final tabulation was completed, Bus Mosbacher, who had sailed *Susan* to fourth place in the day's racing, was top man with a total of 37 points for the five races. Bill Cox, in *Feather*, took second place with 35 points. In the Atlantic Class, Jaywood Lukens, *Hera*, was first and A. C. Barton, *Kumon*, second; in Class S, R. H. McCullough, *Felicity*, took first honors with Philip Patton, *Kandahar*, runner-up.

LAKE MICHIGAN BREEZES

By Warren T. Davis

▶ This fall again saw the famous Virginia Cup up for competition. Last sailed for in 1934, it was then won by *Hope*. Although the cup previously was for the Class Q championship of Lake Michigan, it was raced for by both "Q's" and Eight-Metres this year. The series of three races sponsored by the Chicago Y.C. was won by *Stephia*, a "Q" from the Milwaukee Y.C. owned by Eldred Stephenson; score, 16¼ points. *Conewago*, an Eight-Metre from the Chicago Y.C., owned by Al Pequet, took second with 15¼ points, and Clare Udell and Ole Karas' "Q" *Falcon II*, Chicago Y.C., took third with 14¼ points. *Hope* took fourth.

▶ The 17th Annual Commodore Sheldon Clark Regatta was run off Monroe Street in a fine breeze, on September 20th, when the Chicago Y.C., was host to thirty-eight fast-moving yachts in this event. The Cruising Division Time Prize was won by C. J. Thiebault's Class D *Valiant*, Jackson Park Y.C., and the Universal Division Prize by Gould Davis' Class R *Tobasco*, Chicago Y.C. *Falcon II*, with the best elapsed time, covered the 12-mile course in 1:20:15. Winners by classes were as follows:

Cruising Division: Class A, *Betty Bro*, Milton Friend; Class B, *Onaway*, S. C. Pirie, Jr.; Class C, *Rubaiyat*, N. Rubinkam; Class D, *Valiant*, C. J. Thiebault.
Universal Division: Large Sloops, *Falcon II*, Udell-Karas; Yawls and Schooners, *Patsy*, L. J. Bates; Class R, *Tobasco*, Gould Davis; Class S, *Romany*, Heineman-Schmidt; Tumlaren, *Svek*, Sam Clarke; Star Class, *Shrew*, Herbert Hanan.

▶ The Southern Shore Y.C. staged a mass cruise from Jackson Park to Lake Calumet on September 20th.

▶ The Great Lakes Cruising Club has started its Fourth Navigation School with over 293 enrolled — so many, in fact, that two different classes are being held, one on Tuesday nights and the other on Wednesday nights. Previously, the course took fifteen weeks but this group will devote sixteen weeks to the job.

▶ Don DeWitt, Secretary of the Green Bay Yacht Racing Committee, has turned his power cruiser *Valiant* over to the Coast Guard. She is the Captain of the Port's boat at Green Bay. DeWitt has also disposed of his Sea Gull and has bought one of Dunham's Senior Stout Fellas. Dr. Peter Urnes, of the Michigan City Y.C., and his three boys are now the owners of a new Lightning.

▶ The Michigan City Y.C. National One-Design club series for 1942 was won by Rear Commodore Leroy Lippman, but only by a margin of one point over Otto E. Palm, runner-up.

▶ Statistics are not yet available on the fine work done by the large group of Chicago yachtsmen in midshipman training, but the season just at an end required a vast amount of time and work. The program was expedited by coöperation between yachtsmen on boats and yachtsmen now in Navy uniforms.

▶ Although this isn't a social column, mention should be made of the splendid work being done by Mrs. William Farout, who has carried on a series of dances for the midshipmen enrolled at Abbott Hall. These dances, sponsored by the Chicago Y.C. and held at its Monroe Street Station, are now in their second year. Many hundreds of boys have attended.

▶ The Chicago Y.C. runs the eight-mile Buoy Race for members only as the last racing event of each season. It is usually heavy going and this year was no exception. Time allowances are taken at the start so that the boats are strung out at the beginning and tend to close up at the finish. The eight miles out and eight back to Belmont Harbor were tough going this year, with lots of blown out canvas. Eddie Schnabel, in his "R" boat *Yankee*, says he bailed himself to victory in the Universal Division. He beat *Falcon II* by only 30 seconds. Sam Pirie took the Cruising Division prize in *Onaway*.

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MAINE COAST NOTES

By Lawrence B. Getchell

▶ Five Army-Navy "E" pennants are now displayed at various points along this coast, the latest recipients of the honor being the Hyde Windlass Company, of Bath, and the Snow Shipyards, Inc., at Rockland. Hyde received the award on September 21st; presentation was made to Snow's next day — shortly after the yard had launched *Extricate*, first of the 183′ salvage tugs it is building for the Navy.

▶ At the annual meeting of the Searsport Museum on September 22nd, Lincoln Colcord reported encouragingly on the forthcoming publication of Captain Charles E. Ranlett's autobiography, "Master Mariner of Maine." It is understood that 300 copies of this book will be produced and that distribution will be handled by the printer, the Southworth-Anthoensen Press, of Portland.

▶ A spectacular piece of local color left Maine waters recently with the announcement that the old three-master *Lucy Evelyn* has been sold by Captain Everett Lindsay, of East Machias, to a newly organized firm, the Lucy-Evelyn Shipping Co., Inc., of New York. The old schooner was built in 1917 by the Frye-Flynn Co., at Harrington, Me., and ever since then has been a familiar sight to yachtsmen cruising this coast. The *Lucy's* rig hasn't been cut down despite her age. She still carries topsails on all three sticks; hence she has a lot of appeal when under sail. She'll be missed.

ON COLLEGE CHARTS

By Leonard M. Fowle

▶ The largest regatta of the early fall season was held by the U.S. Coast Guard Academy B.C., on the Thames River, on October 11th. It demonstrated that M.I.T. is back among the leading threats in all I.C.Y.R.A. regattas. The Engineers beat the Coast Guard in light and fluky airs, 62½ to 52. Brown tallied 46, Williams 34½, and Pennsylvania 25.

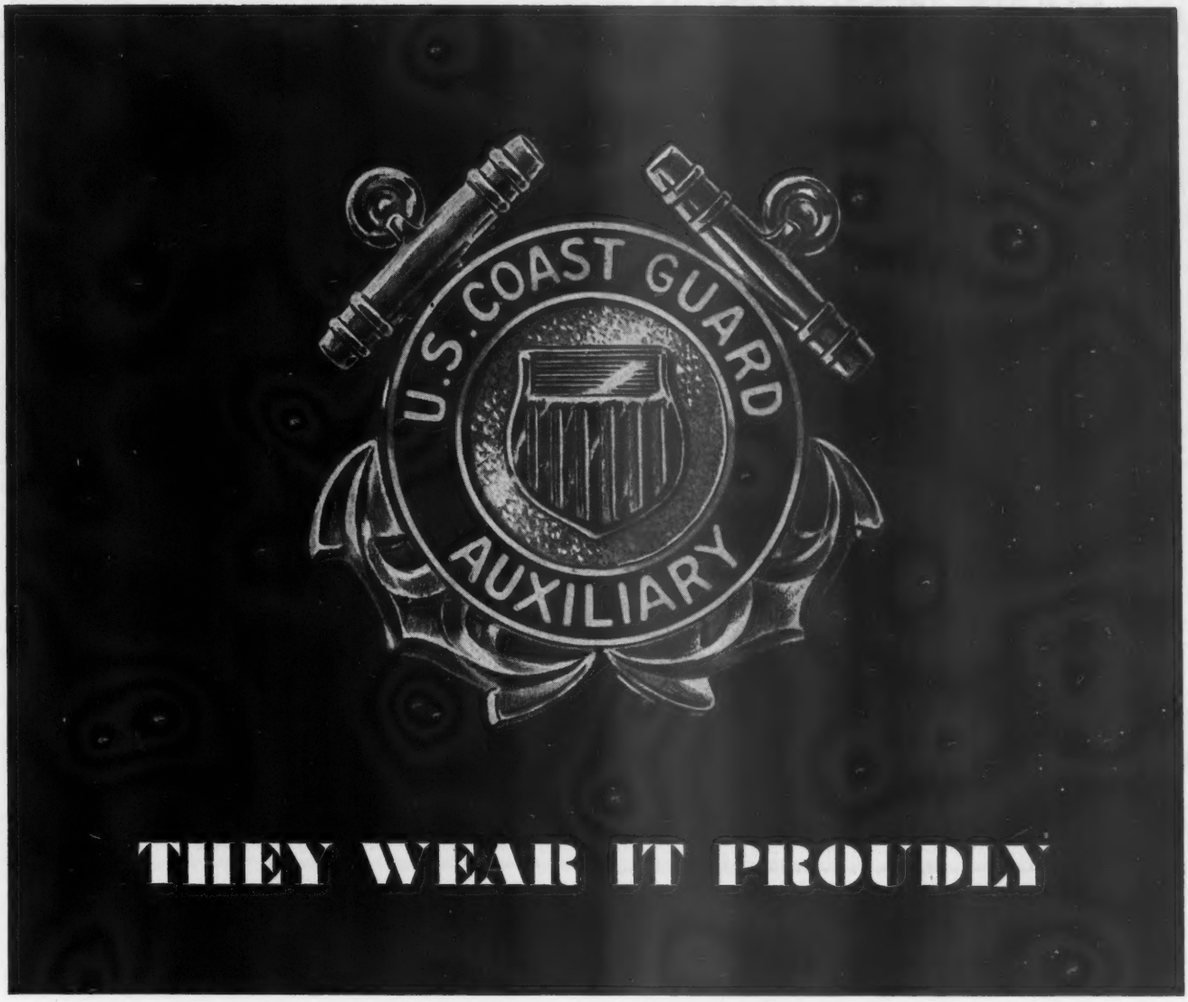
Harold Boericke, of Tech, was the high point scorer as he led Cadet Arthur Fontaine, of Coast Guard, in the second division, 22 to 19. His two teammates, Sam Parkinson and Ralph Evans, gave able support.

▶ On the same afternoon, the Yale sailing team outclassed the Coast Guard sailors in a dual meet in Stars. Cliff Lewis, of the Elis, won two races and led his team to a 50–34 triumph.

▶ Prior to losing these meets, the Cadets, under their new coach, Lieutenant Walter C. ("Jack") Wood, U.S.C.G.R., had taken three dual meets in the 12-foot International Dinghies. One of these was a victory over Yale, on September 12th, by 102 to 77¼. Arthur Fontaine was high scorer with 32¼ points and some good work was turned in by a new third classman, Cadet Philip Hildebrandt, who learned his sailing on Chesapeake Bay.

▶ On October 4th Arthur Fontaine again led the Coast Guard team to a dual meet triumph at the expense of the strong Holy Cross outfit as, ably supported by Daniel, he tallied 38 of the Coast Guard's winning total of 139 points to 112 for the Crusaders whose best sailing was done by Tom Macdonald and Arthur Ogden. The Coast Guard's third victory came on October 10th when the Cadets topped Trinity, 76–64. In this regatta, Cadets David Rasmussen and Philip Hildebrandt, with 26 and 25 points, respectively, led the Coast Guard team and Edwin Taylor of Cold Spring Harbor and Dick Page turned in some excellent work for Trinity.

▶ *Around the Campuses:* Emil "Bus" Mosbacher, Jr., has been elected commodore of the Dartmouth Corinthian Y.C. to fill the unexpired term of Allan L. Priddy, Jr. . . . Bob Wight becomes the Indians' vice commodore. . . . Princeton has a new commodore to succeed John Denison. He is William A. Chisholm, the fourth senior flag officer of the Princeton Y.C. in nine months. . . . Hampton Thomas, Jr., chairman of the Brown University Y.C. and a member of the Executive Committee of the I.C.Y.R.A., has resigned to enter the Army. . . . The Michigan S.C. recently held a home-and-home series with the Grosse Pointe Y.C., of Detroit. Grosse Pointe won, 45¾ to 41¼ and 33½ to 30¼. . . . Lieutenant Jack Ware, of the U. S. Army's Engineer Amphibian Command, has been detailed to assist Lieutenant-Commander Harold C. ("Hap") Moore, U.S.C.G., who is in command of the Coast Guard detachment attached to that Army unit at Camp Edwards. Two recent Williams sailors, Butler Whiting, Jr., and Romeyn Everdell, are now Cadets at the North Carolina Pre-Flight School. . . . Leonard A. Romagna who, almost single-handed, won the Morss Bowl for Brown last spring, was on hand as a Reserve cadet at the Coast Guard Academy to cheer his old teammates in the regatta on the Thames, October 11th. The Bear sailors could have used him nicely.



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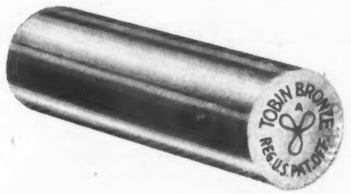

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COMET COMMENTS

By Malcolm D. Lamborne, Jr.

▶ Twelve Comets competed in the fall races of the Potomac River Comet fleet in Washington last month. It was the largest turnout of Comets there in several years and is believed to be due to the great number of newcomers to the Capital. Among the newcomers are three British subjects, two of whom are racing their own Comets. They are Kenneth Clarke, sailing *Popagena*, and W. R. A. Breare, sailing *Sybella*. Both are members of a British Admiralty delegation. The third Englishman, Col. Malcolm Prentice, who is with the British Joint Staff Mission, has been crewing for Ed Braddock in his *Toby*.

Leading the class after three races — it is a six-race series — was Clarke Daniel in his *Robert E. Lee*, with 28½ points. Braddock was second with 22 points. In third position was Capt. E. L. Cochrane's veteran *Scuttlebutt*, sailed by National Comet President Verner Smythe.

▶ Charles Rogers, sailing *Bud*, and Don Peterson, sailing his *Blue Peter*, each won prizes in events of the Larchmont Y.C. over Labor Day on Long Island Sound. Rogers scored in the special Saturday race and Peterson in the Labor Day regatta.

▶ Fleet champions for 1942 will be awarded appropriate certificates from the national body, it was learned last month. The decision was made in the light of the cancellation of this year's national championships. The presentation of championship certificates is expected, however, to become an annual custom.

▶ Chadwick Hall, of Westport, Conn., is building a Comet, according to word from the Sound, and he is expected to be heard from next season.

▶ Two Comet skippers from the Indian Landing B.C. fleet, near Annapolis, Md., have been racing with the Potomac River fleet this fall. They are James Campbell, of the Comet *Woofum*, and George Adamson, Comet *So Solly*.

▶ With reports emanating from Washington that the gasoline situation will be licked by next year, officials of the C.C.Y.R.A. have indicated that some sort of national-scale regatta will be held in 1943.

▶ A new Comet fleet has been chartered at the Echo Bay Y.C., New Rochelle, N. Y. Acting fleet secretary is Charles E. Rogers, who owns the Comet *Bud*. Others active in getting the latest group under way are William Baltz, skipper of *Blue Peter*, and Arthur Miller, skipper of *Uno*.

CHESAPEAKE BAY ACTIVITIES

By Bugeye Bill

▶ The Hampton One-Designs made their one big appearance of the year at the Urbanna Y.C. annual regatta on the Rappahannock River in September, and J. W. ("Willie") Hurst, the Norfolk sailmaker, emerged the winner in his veteran *Lucille II*. He sails with the Norfolk Y. and C.C.

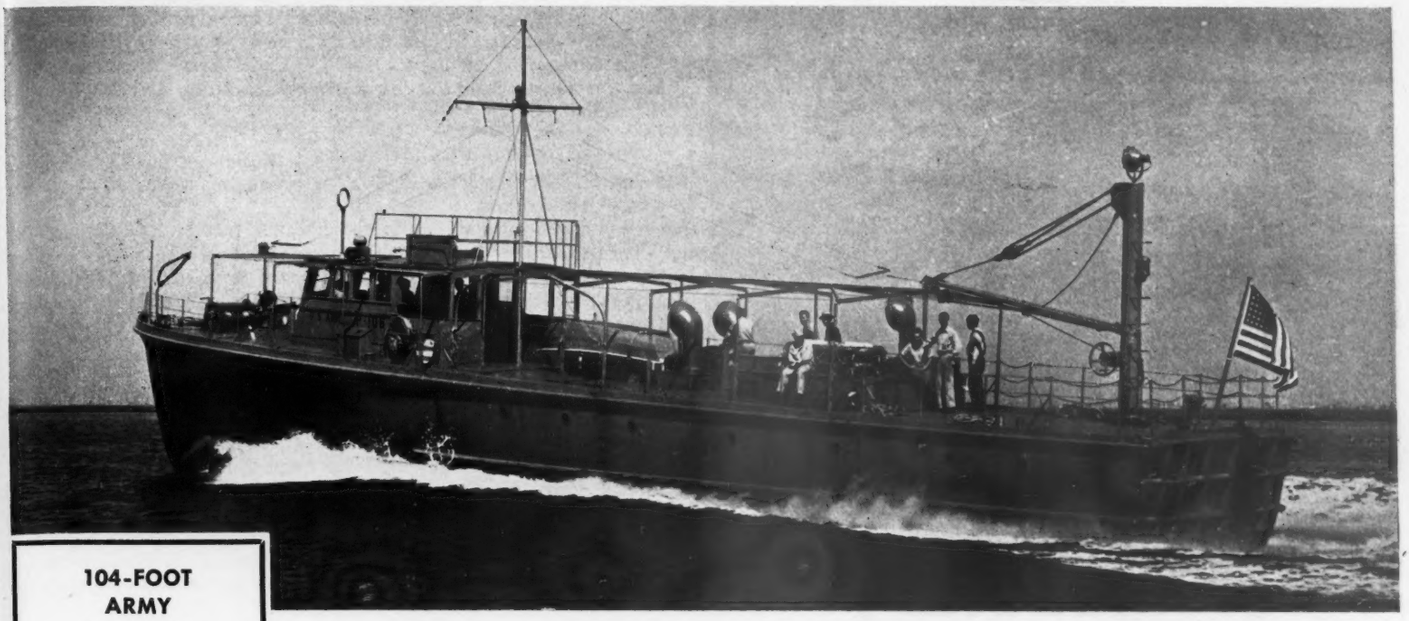
Young Bill Cox, who hails from the same club, placed second in *Silver Spray II*. Third place was won by Charles W. Nelms, sailing *Sandy*, of the Algonquin Y.C. Because many Hampton sailors are youngsters of fighting age, the class has been depleted considerably the past season. In addition, most class activity has centered around Norfolk and Hampton, where sailing has been virtually halted.

In the Handicap Division of the U.Y.C. regatta, Harry F. Dryden's *Quail*, of the Rappahannock River Y.C., was winner. Winner of a special handicap class which included a Comet, a Snipe and a Moth was Carter M. Keane's *Fair Play*. He is commodore of R.R.Y.C. and his boat is a Snipe. Day Lowry was chairman of the race committee and McDonald Wellford of the regatta committee at Urbanna.

▶ The ninth annual fall series of the Potomac River S.A. has been notable for several reasons: (1) a total of 33 boats has been out, more than at a number of Bay regattas this year and the largest fleet in Washington in over a year, and (2) the first appearance of two Stars at any one time on the Potomac; they have been given permission to race with the Chesapeake Twenties.

At the half way mark of the six-race series, the following were leading in their classes: Warren Mitchell's *Vanguard*, Corinthian Y.C., Chesapeake Twenties; Clarke Daniel's *Robert E. Lee*, Capital Y.C., Comets; and *Vim*, sailed by Col. W. S. Conrow, Capital Y.C., Handicap Class. The last-named is a Lightning owned by Jack Babcock, now an officer in the Engineer Amphibian Command. All three boats have scored wins in each race.

In the Penguin Class, the story was a little different. There National



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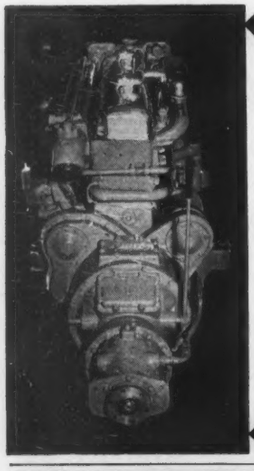

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Champion Walter Lawson, in his *Potlatch*, Corinthian Y.C., and 13-year-old Beverly Youngs, Old Dominion B.C., were tied with 17⅙ points each. The latter is sailing her father's *Sea Biscuit*, with father Youngs serving as crew. One point behind this pair was Jack Reckord in *Side Car*, from the Maryland Y.C.

▶ The same week-end as the U.Y.C. event, the Maryland Y.C. held its annual Star Spangled Banner regatta, which this year was minus the feature power events.

Keenest competition was in the Penguin Class, with Washington's Walter Lawson scoring a first in final points after a five-race series. A point behind him was Charles Runyon, in *Murgaes*, of Capital Y.C. Jack Reckord, racing in home waters, managed a third place. Winner in the Snipe Class was Roger Gintling, of the Sparrows Point Y.C.

▶ With neither sail nor power races of the big President's Cup Regatta being staged this year in Washington, officials there loaned two of their speed boat trophies to the Magnolia Y.C. which held a regatta at New Martinsville, West Virginia, in September. They were the Hearst Trophy and the Palais Royal Trophy, the latter formerly raced for as the A.P.B.A. 225-cubic-inch hydroplane championship.

▶ Arthur Middleton, who went into the Coast Guard Reserve as a boatswain's mate with his cruiser from the Corinthian Y.C., in Washington, has been commissioned a lieutenant and assigned to the staff of the commodore of the Auxiliary for the Third Naval District.

MASSACHUSETTS BAY FLASHES

By Ed Earle

▶ Small boat racing has been going strong this past month despite high October winds. There was a near repetition of the famous hurricane when a half gale hit one day in late September. There was some busy work, especially on the North Shore at Swampscott and Nahant, rescuing boats and floats which had gone adrift.

▶ The Squantum Y.C. kept a big fleet of Indians racing into October with "pick-up" races followed by a two-race fall series which was won by the *Papago*, noted heavy weather dory, with "Bob" Dalrymple and Harry Colburn aboard. Two second places enabled *Papago* to take the prize. At Marblehead, the Town Class, a dozen boats on an average, raced under the burgee of the Boston Y.C. every Sunday through October 18th. Big fleets of Comets and Snipes raced through week-ends on the Mystic Lakes. The Winchester B.C., headed by Commodore Donald R. Simonds, boasts of having one of the largest Snipe fleets in the East. On the day of the "big wind," the Snipes were planing over the Mystic and fine seamanship was the order of the day. This class has an unwritten rule during the fall series that if any boat gets in trouble the rest of the fleet heaves to and goes to the rescue. The Comets sail out of the Medford Y.C. They were beaten 263 to 156 by the Winchester Snipes in a team contest.

▶ More than the usual number of inquiries for this time of the year have been received in the brokerage department of Eldredge-McInnis, Inc. Among the recent list of boats which have changed hands are the 28′ 6″ over all auxiliary sloop *Radiant*, from Clarence G. Sayles, to Thorsten E. Nelson, of Newport, R.I.; the 28′ auxiliary sloop *Solitaire*, from ex-Commodore C. Adrian Sawyer, Jr., of the Boston Y.C., to William S. Moody, Jr., of Apponaug, R.I.; the Matthews "38" *Doreon*, from H. Leon Laycock, of Providence, to Myron K. Stone, Chestnut Hill, to be renamed *Aurore;* the Manchester 17-footer *Shad*, from Paul M. Rice, of Cohasset, to Alfonse Tilibaitis, of South Boston; the 30′ sloop-rigged motor-sailer *Damajo*, from Harold P. Cooley, of Hingham, to Henry N. Wendell, of Cape Porpoise, Me.; the 110′ Diesel yacht *Aide-de-Camp*, sold from the Frank D. Comerford estate to Harvard University.

▶ A twin Diesel 39′ sport fishersman, built by Baltzer-Jonesport Boat Corp. under the supervision of Eldredge-McInnis, Inc., has been shipped to Dennis O'Connor, of Astoria, Tex.

▶ The new 103′ dragger *Columbia* has been launched from the yard of Lyman James, at Essex, for Lieut. Paul Bauer and Capt. Ben Pine, of Gloucester. She was christened by Lieut. Bauer's daughter Betty before a large gallery of prominent skippers and fishery officials. The new vessel is a namesake of the noted Gloucester fisherman *Columbia* which foundered in 1927 off Sable Island. She is a schooner type dragger of modern design, from the board of Eldredge-McInnis, Inc. This graceful but rugged craft has an increased amount of freeboard, which allows extra depth in the hold, so that she can make loaded runs with less rolling scuppers under.

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NARRAGANSETT BAY GOSSIP

By Jeff Davis (Old Doc)

▶ Seems to be a lot more boats in the water than usual so late in the season. Maybe the reason is a combination of unusual conditions. We have had pretty good weather right up to the time of writing this, and it isn't the easiest thing in the world to find a yard that will haul a boat of any size.

Uncle Sam's Navy has signs over the gateways of fully half the boatyards on Narragansett Bay, and they're the biggest yards. Either they, the Rheems shipbuilding plant, Quonset Point, Davisville, or some one of the big-wage war industry plants have gobbled up most of the small yacht yards' regular help. If the yard owner can hold on to one of his regular men, he's lucky. In one small yard here, the boss will superintend the hauling but the boat owner has to find the "beef" since it's a little place.

▶ The Edgewood "Peppy Pappies" and the Barrington "Tired Fathers" finally got around to sailing that long talked of team race, and the Peppy Pappies won by one point, but it wasn't until only two of the ten boats racing still had to finish the contest that it was decided which parental group would have to set up the steak supper.

The event drew heavily upon the sailing talent among the power boat owners of both clubs. Most of them had been sailing men at some earlier time but had transferred from the marlinspike to the monkey wrench division. However, they still liked to tickle a tiller once in a while, and were bringing up their children in the way they should go, so there were plenty of kids' boats when they needed them.

With the contestants coming from different parts of the Bay, the match was sailed in neutral waters just north of Conimicut Point. The Peppy Pappies' skippers were Wendell Brown, Ed Tiffany, Jim Latham, Russ Boss and Ed Barrows. Byron Waterman, Winslow Lincoln, Norman McCulloch, Fred Mason and Ray Colley carried the Tired Fathers' banner. Wendell Brown, the Peppiest Pappy of them all, won all three races. The Pappies won the first race, 28 points to 27. Then the Pappies won the second race by 29 to 26, which put them four up and great was the rejoicing in their ranks. But they stopped for lunch. Then, refreshed and filled with determination to avenge the defeat, the Tired Fathers started in the third race, and took it, 29 to 26.

▶ About that thirteen dollars that Tom Harris won in the last Pappy race at the Edgewood Club and gave to the junior committee to buy a prize with, Russ Boss spread that thirteen bucks over some carefully cultivated ground and got enough prizes with it to give a couple of prizes for each of the three Harris Cup races and a first, second and third for the three top places in the series. Arnold Cady took all four first prize cups. Ricky Wilson took the series second place and Russ Nickerson third.

▶ After racing through the vacation season, the Brown College skippers took the best two in each of the six groups that had been sailing, raced them four times, then took the six top skippers and matched them in four races for the championship. Bob Barningham won with 17 points and Harold Kinne and Jim Starkweather tied for second with 11 apiece.

▶ After being mighty considerate about letting a skipper take full advantage of that 30 minutes after sunset to get to his mooring, the Coast Guard here has notified boat owners that, hereafter, sunrise means sunrise, and sunset means sunset, and nothing else. Boats found under way before sunrise or after sunset will be towed to a mooring and left there, and the owner, skipper, or whoever is responsible will go on the carpet and the boat's license to navigate will be taken away. Just another case of the few who wouldn't play by the rules, getting the whole team put off the field.

▶ *Short Ends:* Edson Sawyer has bought Erik Berkander's Beetle *Shark*, which means another small girl skipper in the class next season. . . . Power Squadron has started getting out a little monthly sheet called the "Narragansett Clipper." John McDevitt is editor. . . . Classes are all under way now for the winter. More interest than ever, lot of the men who are looking for berths in the Navy or Coast Guard seem to think the stuff they can get from these Power Squadron courses can help them. . . . H. Allan Grimwood has bought the 46′ Chris-Craft *Arrowhead* from Elinor Stewart Sokol, of New York. . . . John and Anthony Waller have bought the Indian Class *Redwing*, one of the class at Squantum, Mass. . . . Prescott Gustafson has sold his Snipe *Puffin II* to Betty Paine, of Warwick. Prescott is in the Coast Guard and there's no Snipe Class there.

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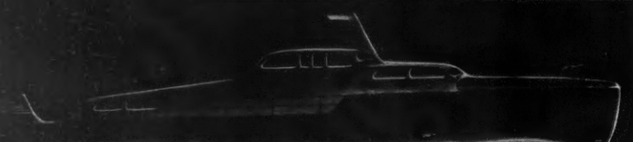

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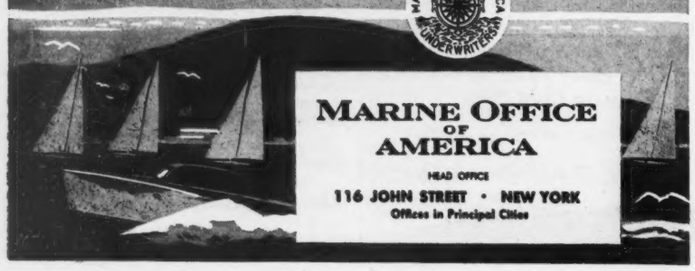

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LAKE ONTARIO NEWS

By W. Peck Farley

▶ One of the most successful seasons of the Sodus Bay Y.C. has been concluded. The Robin and Snipe Classes, beginning with the June series, have gone full tilt all summer, though the handicap fleet was not as active as usual.

"Chip" Stuart, son of Ex-Commodore Lyman K. Stuart, made a clean sweep of two short series when he won the Paton Trophy and the Commodore's Series titles in the Robin Class. Lloyd Ludwig gave the boys and girls a trouncing in the Snipe Class fall series.

There is much earnest talk about a one-design keel boat class suitable for the waters of Sodus Bay and Lake Ontario, with sentiment shaping up strongly for the Star Class. Local sailors recognize the importance of inter-club and national competition, realizing that this is an opportunity to get in the "big time." The club already has two excellent Stars in Harrison Bloomer's *Suzette II* and Burt Harness' *Starlet* which might be used as a nucleus for a topnotch racing fleet.

▶ The Algonquin Y.C. wound up the sailing activities of a good season with a fall series, Dick Claver coming out on top with seven firsts. In the entire season, Claver won fourteen out of fifteen races.

▶ The Canandaigua Y.C. did not have as active racing this year as usual because of gas rationing and the number of men in the service. The Snipe Class sailed a fairly full series, however, with George Bridgman coming out with top honors. He was followed by Vin Hall, in second place, and Robert Simmons, in third.

Many of the officers of the Sampson Naval Training Station, near Canandaigua, have shown interest in the sailing activities of the Canandaigua Y.C. They were the guests of the club at a recent clambake.

▶ The Nine Mile Point Y.C. had 24 Snipes sailing during the season and raced pretty consistently every week-end though trips afield (or should it be a'sea) were greatly curtailed. George Glenn won the club championship; Jack Moxon was second; Nelson Grabbenstetter, third; Chet Miller, fourth.

Stanley Fredman, of the Nine Mile Point Y.C., has left for the Army and Herbert Johnson for the Navy.

▶ The Rochester Y.C. flag was half-masted again in September for another member of long standing, Frank T. Christy. Mr. Christy was prominent in yachting circles for over a half a century, both in this country and in Canada. He supervised the building of the *Iroquois*, which won the Canada's Cup in 1905 by defeating the Canadian boat *Temeraire*. He and the late Charles VanVoorhis, who also died this summer, were an inseparable yachting team and sailed together for many years in the *Iroquois I* and *Iroquois II*, a Class P boat.

The annual Cups'N Flags Dinner was held at the club late in September with George Culp, race chairman, presiding. Only 65 races were sailed this summer from June 1st to September 13th, as against 110 last season. An average of 45 persons participated in each race as against 95 last year.

The Madge Cup, which is emblematic of the best all around performance, went to "Rooney" Castle, skipper of the Six-Metre *Stork*. He had a first in three series and a second in one series. Virginia Cole and George Ford, in the Dinghy Division, and Cliff Baker and Jeff Dale, in the Star Class, also had outstanding all-season records.

Club championship series cups were awarded to George Ford, in the Dinghy Division; to "Rooney" Castle, in the Six-Metre Class; and to Peck Farley, in the Star Class.

Commodore Bill Nevin made the presentation of the plaque bearing the names of the men in service which is to hang in the clubhouse.

Buss Warden, who was one of the first members to leave for the Army, has been made a Second Lieutenant.

FLORIDA TRADE WINDS

By Vivyan Hall

▶ The trial boat which the National Association of Boat Builders is recommending to the Navy for use against submarines has had two tests. Variously called a "gnat" and a "bantam," she proved fast and handy on her first tryout. This was in the Gulf Stream, off Miami, before a civilian committee headed by Commodore Charles F. Chapman, of New York. The group included Lawrence Schwab, former commander of a sub-chaser; Mortimer Auerbach, speed boat racer; Robert McAllister, interested in small boat possibilities; and Joseph Rose, of New Orleans, representing the National Maritime Union, which has suggested using such craft as life boats aboard freighters, tankers and transports. Down from Washington

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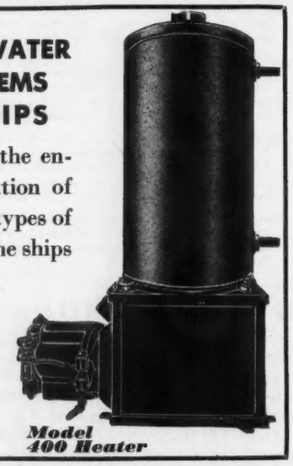

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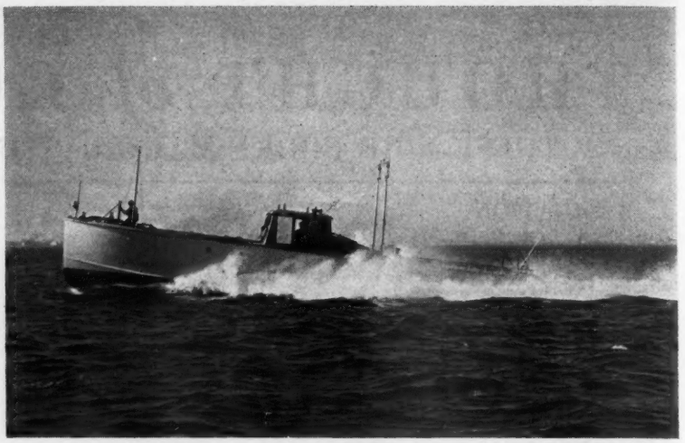

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for the official trials came Rear Admiral David M. LeBreton, chief of the Navy's board of inspection; Senators James M. Mead and Charles O. Andrews and Congressman Frank A. Boyken. During demonstrations of machine gun attack and depth bombing, the boat proved she could get well clear of the danger from her own charges.

▶ Prigg's plant is now working on an order for 32′ Navy landing boats. Equipped with full length bumpers, they also serve as seaplane tenders. Another 32-footer built in the Jacksonville schools has a Chrysler engine, two-way radio, pumps, and two monitor type nozzles for use as a fireboat around the harbor. The vocational school at Lake City has turned out a 26′ cruiser with which the State Board of Fishing Conservation is patrolling the Keys. New Port Richey, near Tampa, has a school project for building 30′ cruisers for river and harbor patrol. J. K. Clouser, old time shipbuilder, is in charge there.

▶ On the same day that the new aircraft carrier *Lexington* was being launched up at Quincy, Massachusetts, the *Little Lexington* was put overboard at Fort Myers, Florida. This was the first of the ten barges that the Fort Myers Ship Building Co. is turning out for the Navy. Further up the Gulf Coast, at Panama City, a new six-way yard is under construction for the production of Liberty ships. Other important freight carriers are under construction for trade between the various West Indian ports and the east coast of Central and South America. These are the 300 auxiliary schooners planned by Nelson Rockefeller's commission and financed by a $10,000,000 R.F.C. fund. The building of these three-masters has been spread over twelve Latin-American countries.

▶ Two landmarks along Florida's East Coast waterway have gone to war. The *Amphitrite*, the floating hotel at Fort Lauderdale, has been towed to Washington, going outside as far as the St. Johns River and then through the inside route and Chesapeake Bay. A double-turreted monitor in the U. S. Navy dating back almost to the Civil War and in commission during the Spanish War, she is fighting this one out on the housing front.

▶ Paul Reece, former commodore of the St. Petersburg Y.C., is in the Coast Guard as a warrant boatswain on duty in the Eighth Naval District. Serving as a boatswain's mate is his son Paul, Junior. Richard Goodhart, former commander of the Miami Power Squadron, and Howard Bond, yacht broker, are lieutenants (j.g.) in the Seventh District. In the Sixth District, Lieutenant-Commander Chester A. Anderson has lined up a new Auxiliary flotilla among the boat owners of Mayport, at the mouth of the St. Johns River. Officers are W. E. Montgomery and Eugene Zapf, of Jacksonville Beach, and Otto Hahn, of Mayport. Their thirteen cruisers range from Henry Isaac's 22′ *Optimist* to Thomas Smirch's *Dixie Paul*, a 45-footer.

▶ Tying in with the rush construction of the pipe line across Florida to ease the gasoline and fuel oil shortage, Gordon Duke and other Jacksonville men have leased a number of idle steel barges. Formerly used on New York State canals, they are reported sufficient to carry 5000 barrels a day up the inside route. To hurry the completion of the Gulf waterway from Corpus Christi to the beginning of the pipeline near Panama City, a presidential message has urged the immediate appropriation of $6,500,000. Bills are under consideration in Congress authorizing the construction of the "missing link" between the Delaware River and New York. This would give a protected inside route from the Texas fields to the industrial centers of the East.

PACIFIC NORTHWEST CAT'S-PAWS

By Ray J. Krantz

▶ S. E. Sagstad's shipyard, Seattle, is constructing a group of new aircraft rescue vessels for the U. S. War Department. These vessels measure 100′ in over all length, and have three motors. In addition to the gear peculiar to vessels of this classification, the new 100-footers have other interesting characteristics. These latter include raked stems, transom sterns, a round-bilge type hull ironing out aft into a V-bottom form, flush deck hulls, and a minimum of deck erections.

Henry Schurman, well remembered in Pacific Northwest marine circles for his association with Captain Heinie Berger, the Alaska Diesel freight vessel operator, is now associated with the Sagstad Shipyards.

▶ Speaking of Army vessels, the newest development at Seattle is the construction of a series of new 127′ twin screw Diesel-powered tugs of ocean-going abilities for the Army, by the new Lake Washington shipyard of Barbee Marine Yards, Inc., of Seattle. These vessels are wooden craft of stout construction and able appearance.

▶ Anton F. ("Tony") Sulak is the new commodore of the Queen City Y.C., Seattle. He was elected to his new post at the October 1st meeting of the club. Sulak, incidentally, owns the 52′ power yacht *Averilla*. Vice commodore of the club for the 1942–1943 season is Jimmy Foster, skipper of the 30-footer *Tu Nante;* while F. B. Mossman, owner of the 32′ cruiser *Marian*, is rear commodore. Al Kurtzman, well-known owner of the cruiser *Mer-na*, a 36′ power boat, is the new treasurer while Elwood Stone, who has the 34′ cruiser *Sarna*, is the new secretary.

▶ Members of the Queen City club early in September staged a mass sport fishing party for 185 service men on the waters of Puget Sound. Crew members were held at a minimum so that the greatest possible number of service men could go along. Thirty boats were included in the fleet which had its lunch-time rendezvous at Point Monroe. Later the same day there were more eats and movies at the clubhouse. By the way: Plenty of fine, big salmon were caught!

▶ Newest member of the Seattle Y.C. is Edward Hefty, Portland yachtsman. He brings to the Seattle club's roster of sailing yachts the 53′ Oregon-built auxiliary schooner *Pagan*.

▶ John Tegstrom, commodore of the Bremerton Y.C., has sold his 40′ cruiser *Lorena B.*, with 100 hp. Brennan engine, to George Duncan, Seattle. Mr. Tegstrom will not be without a boat, however, for he has bought through Tom Farrell, of Washington Boat Works, Seattle, the 38′ cruiser *Orion*, formerly skippered by Earl Nelson, Seattle. *Orion* is a trim cruiser with 90 hp. Chrysler motor.

▶ Most interesting was the report from Alaska stating that when the commanding officer of an unidentified military establishment in Alaska asked approximately 600 of his enlisted men if they would like to build boats in their spare time, two-thirds of them enthusiastically said "yes." This officer presented the problem to Edwin Monk, Seattle naval architect, with the idea of buying suitable small boat designs from him. The architect, however, supplied the plans without charge, as a contribution to the war effort.

▶ The Seattle Y.C. was to hold its annual elections late in October. This club staged its last scheduled event of the 1942 calendar on October 10th and 11th, Barnacle Bill's Last Cruise, with miscellaneous sailing races on Puget Sound and a rendezvous at Port Madison spit. Highlight of the cruise was a sailing race to Indianola and back, preceded by the spectacle of all of the sail boat skippers rowing out to their respective craft. None of the boats was allowed to get under way until the skippers were on board. The first boat to return to the starting point had the privilege of opening the hunt for the "buried treasure," which turned out to be a case of rum. A sailing race held on the first day was won by William Hedley's schooner *Sindbad*. Twenty-six boats participated in the two-day cruise, according to Malone Hutchins, manager of the club.

▶ The Washington Boat Works, Seattle, has expanded its facilities for the construction of small craft so that twelve new 50′ twin screw Coast Guard patrol boats are now being fabricated simultaneously. Early in October, the last of the boats ordered by the Coast Guard was completely framed, with finishing-up work proceeding apace on the rest of the fleet.

▶ *Riparia* is the name of a new river tug and barge tender recently commissioned at Portland for the U. S. Engineers. The vessel, built by the Klepp Marine Ways, of Rainier, Oregon, is to be used on the Snake and upper Columbia rivers. The 45-footer is powered with a pair of 215 hp.

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Hall-Scott Invader marine gasoline engines, which give her a speed of about 16 m.p.h.

▶ Designations for U. S. Navy "PC" type 173-foot sub-chasers are prosaic, such as "PC-580" and the like. This apparently left something to be desired, as far as workmen were concerned, at Albina Engine and Machine Works, Inc., Portland, so they gave their 173's additional and more colorful nicknames. Their latest, *Hell Hammer*, was launched October 10th, following keel-laying on August 29th. Others in this series of Portland-built chasers have equally picturesque names, including *Hell for Dictators, Hell for Hirohito, Hell for Heinies, Hell in General, Hell A-Plenty, Hell for Hitler, Hell for Goering, Hell Harvest,* and *Hell Galore.* In general, this does not seem to be a bad idea for, after all, any good ship is entitled to more than a number by way of identification.

DETROIT RIVER AND LAKE ERIE NEWS

By Walter X. Brennan

▶ One of the first anti-motor boat ordinances to come before the Michigan Supreme Court was blasted by that august body on October 5th when a decision was handed down that the City of Howell "cannot prohibit that which is permitted by the State." The city had passed an ordinance that no outboards of more than five horse power could be operated on Thompson Lake. A $5 fine or 20-day jail sentence against a "violator" brought the case to court.

▶ Yacht owners are experiencing considerable difficulty this year in getting their boats out and stored for the winter. Yards which have accommodated them in the past, such as Chris-Craft, Fisher, Liggett, Lyman, Matthews, Stadium and others, are now engaged in war work. The yards still open to civilian work are hard hit by the labor shortage and it is likely that owners will have to turn to and haul out their own.

▶ It was feared that the recent ruling that no non-commercial boats may operate in the ship channels of the Detroit and St. Clair rivers after sundown would mean the close of the pleasure boat season, but the Coast Guard has not clamped down except where interference with commercial traffic might result. Where channels take up the entire width of the waterway, the patrol has allowed yachts to slip through close to shore.

▶ Gasoline rationing for automobiles, which comes to the Midwest for the first time this month, is giving the clubs considerable worry. Many of the clubs here maintain active social seasons through the winter with possibly as many members visiting the establishments in the winter as in summer.

Elaborate establishments, such as the Detroit Y.C., located off the lines of public transportation, will probably suffer most. With their huge buildings and large staffs, these clubs figure on winter incomes from dances and dinners to keep going. The small clubs, which operate with a single caretaker and have the members drop down to mow the grass or patch the dock, are sitting relatively pretty these days.

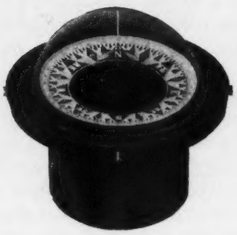
▶ Esmond Avery, active in large boat racing at Detroit, is now a captain in the Civil Air Patrol and in command of an anti-submarine base somewhere on the Gulf of Mexico. Frank Sullivan, of Bayview, has just been commissioned Lieutenant, j.g., in the Naval Reserve.

▶ Mirwin Park, popular rendezvous for yachtsmen near Algonac, Mich., was destroyed by fire. The park contained a hotel, cabins and dance hall. The Detroit Power Squadron held its last rendezvous of the season at the park a week before.

▶ Rear Commander Lee Nelson, U.S.P.S., of Toledo, is now a Lieutenant-Commander in the Navy, teaching navigation. Al Sawtelle, who has headed the Detroit Power Squadron teaching activities, has been made a j.g. in similar capacity. Chet Ricker and R. D. Hartnell, also headliners in the Detroit P.S., have acquired gold braid. Lieutenant Verne Jubenville, also a member and now with the Army Amphibian Command, was in town recently to tell the P.S. members all about it.

▶ Army Intelligence has approved the purchase of Lake Erie charts for Power Squadron study. The charts and similar material were frozen recently for all except commercial and military use.

▶ The great demand for small machine parts and foundry patterns in the Detroit area is maintaining the small yacht business here for the duration and will probably have it in top shape for serving yachtsmen after the war. Most of the outboard dealers with repair shops have added some machinery and taken subcontracts from local war plants while the yards have either taken in machine work or turned their woodworking machinery and workmen to making patterns.



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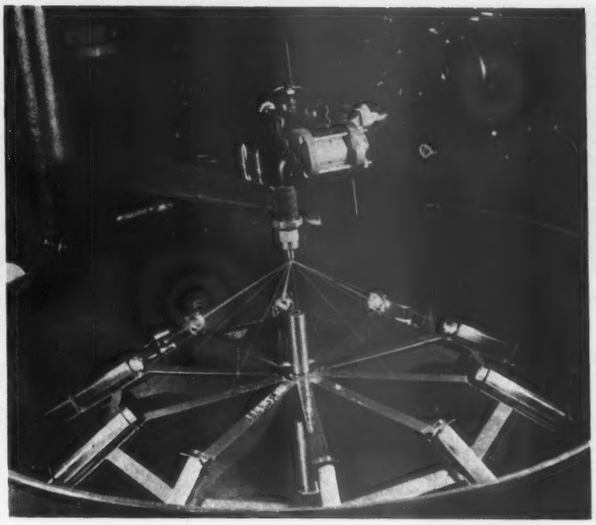


Diesel spray nozzles being tested for accuracy of bore

NEWS OF THE INDUSTRY

TESTING DEVICE FOR DIESEL INJECTION NOZZLE

▶ Not all yachtsmen know that a tiny injection nozzle, smaller than the tip of the small finger, is literally the heart of the Diesel engine. The testing device shown here is a product of the laboratories of the Cooper-Bessemer Corp., manufacturers of Diesel and gasoline engines and compressors. During the test, each nozzle is fitted into an overhanging arm, fuel oil being forced through at tremendous pressure into test tubes placed some inches away.

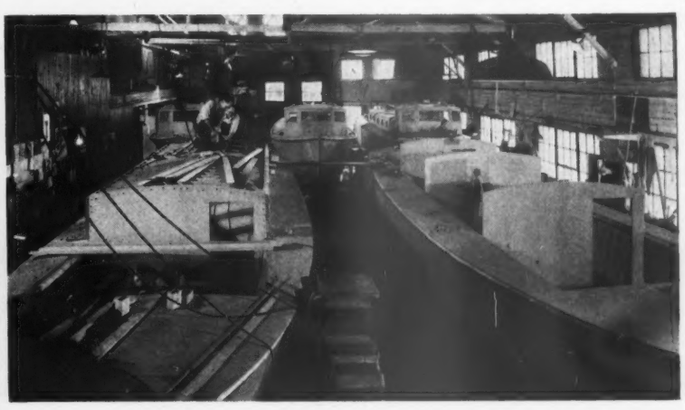
"Each stream of oil," states R. L. Boyer, chief engineer, "must strike the mouth of its particular test tube receiver accurately, and deliver the proper amount of oil in a certain specified time. If the spray nozzle fails to do this, it is rejected. The spray nozzle holes must be drilled at precisely the same angle to assure uniform injection of fuel. If uniformity of injection is not obtained, the Diesel engine cannot operate at its peak efficiency."

GRAY OCCUPIES ADDITIONAL SPACE

▶ The Gray Marine Motor Company's Gasoline Engine division has been occupying new and enlarged quarters since June, and further additions have just been made to the production departments, while the office space has been enlarged to accommodate the Sales and Service departments of the gasoline engine business. The address is 710 Canton Avenue, Detroit. The new Gasoline Engine Sales and Service offices and shops are a few blocks away, with the office entrance at 2930 E. Jefferson Avenue.

HYDE WINDLASS RECEIVES ARMY-NAVY "E"

▶ Some weeks ago Rear Admiral W. C. Watts (ret.) presented the Army-Navy "E" award of excellence to Hyde Windlass Co., of Bath, Me. The ceremonies followed the usual procedure in the presentation of the flag to the president of the company, Rodney E. Ross; the token presentation of



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pins was made to all employees. Another feature of the program was the raising of the minuteman flag. Hyde employees show a record of better than 90 per cent purchase of war bonds.

The history of the Hyde Windlass Co. is a record of continuous growth rather than rapid expansion during any one period; it is also a history in New England shipping and shipbuilding from clipper ship days, through the advent of steam and steel.

Windlasses are only one of many products. Among the others are steerers, winches, capstans, telemotors for the remote control of steerers, and many other machines for use on shipboard and in ordinary industry. The company has furnished equipment for practically every kind of a craft that floats. Until recently Hyde was the largest maker of small propellers in the world, but disposed of this part of the business some time ago to make room for propellers for destroyers and submarines.

NEW RECIPIENTS OF THE ARMY-NAVY "E"

▶ Barbour Stockwell Co., Cambridge, Mass., for many years the manufacturers of the well-known Reliance tachometer; B. F. Goodrich Company (Akron Plant), Akron, Ohio, whose Cutless bearings are among its many products extensively used in the marine field; Mack Manufacturing Co., New Brunswick, N. J., manufacturers of the Mack Mariner Marine Diesel; and the Leece-Neville Co., Cleveland, Ohio, manufacturers of starting and ignition equipment for marine engines.

WALTER L. FAUST ELECTED VICE PRESIDENT OF SOCONY-VACUUM OIL CO.

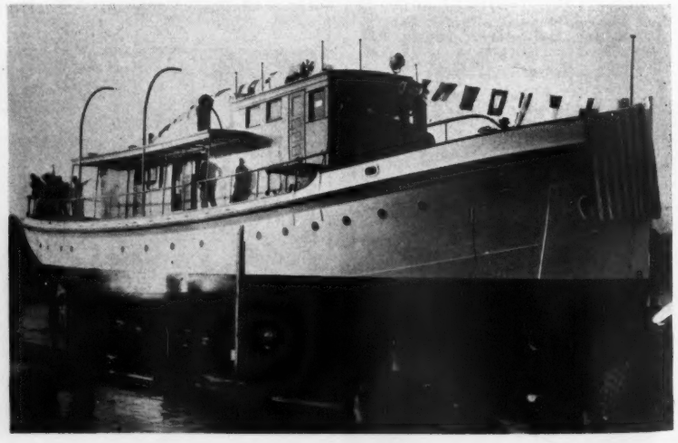
▶ Walter L. Faust has recently been elected a vice president of the Socony-Vacuum Oil Co., Inc. Mr. Faust joined the Vacuum Oil Co. in 1929 and became manager of the Marine Sales Department of that company and later of the Socony-Vacuum Oil Co. In 1935, he added to his responsibilities the direction of the company's aviation sales. In 1938, Mr. Faust was appointed Eastern Sales Manager.

COAST AND GEODETIC SURVEY TENDER HAS A PRESERVATIVE-TREATED WOOD HULL

▶ If 1918 is used as a basis, it might be predicted that wood construction will slacken at the war's end. Such a prediction cannot be made accurately today, however, for certain wood processes and techniques have recently come to the fore that may support and even accelerate the trend to timber. Chief among these techniques in the marine industry is modern dry-salts wood-preserving. The use of treated wood to extend the life of marine hulls was first developed a few years ago by the Astoria Marine Construction Co., Astoria, Ore.

This usage progressed to such an extent before the World War II that Astoria's largest peacetime craft, the 88′ Coast and Geodetic Survey tender *E. Lester Jones*, built in 1940, features an all-treated wood hull. With a beam of 21′ and a draft of 8′, the *E. Lester Jones* was designed by H. C. Hansen, of Seattle, to fit Alaskan service requirements of the Coast and Geodetic Survey.

After all parts were carefully worked to accurate patterns, bored and marked for location, they were pressure-impregnated with Wolman Salts preservative, kiln dried back to their original moisture content, assuring original fit of holes and joints.



The hull of the "E. Lester Jones," Coast & Geodetic Survey tender built by the Astoria Marine Construction Co., is treated with dry-salts wood preservative

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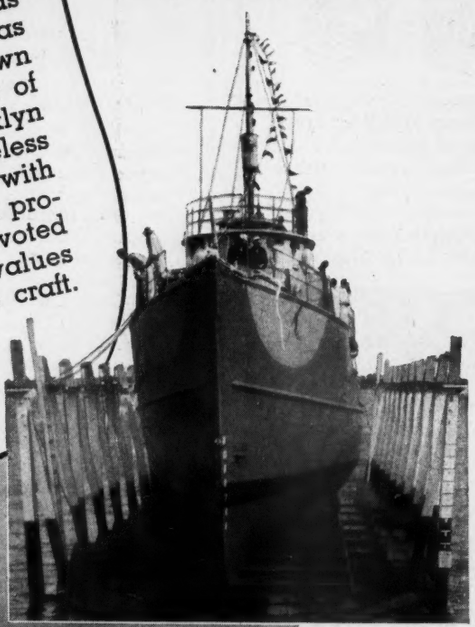
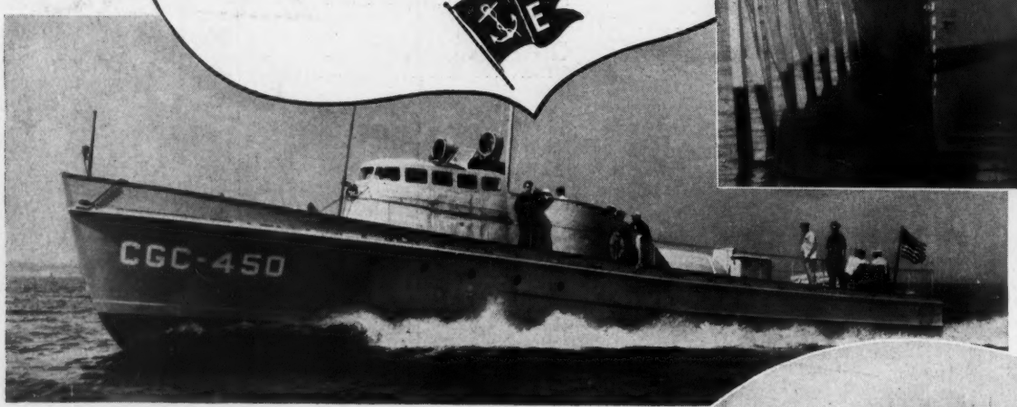
Some of the YMS production lines at the Wheeler Whitestone plant. (Below) Launching 136-foot YMS minesweeper, one of a large fleet being built at this yard.





For the U. S. Coast Guard the Wheeler Brooklyn plant is building a great number of these 83-foot cutters.

(Below) *Bomb Target Boats (60-footers) are also part of our Brooklyn plant's production.*

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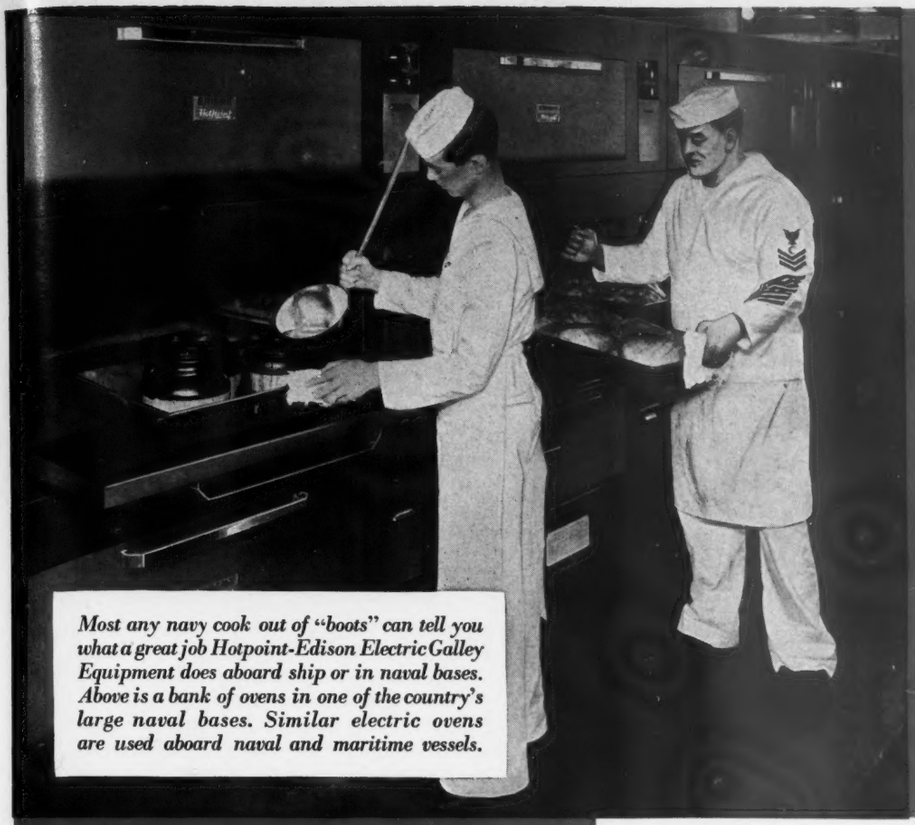

Most any navy cook out of "boots" can tell you what a great job Hotpoint-Edison Electric Galley Equipment does aboard ship or in naval bases. Above is a bank of ovens in one of the country's large naval bases. Similar electric ovens are used aboard naval and maritime vessels.

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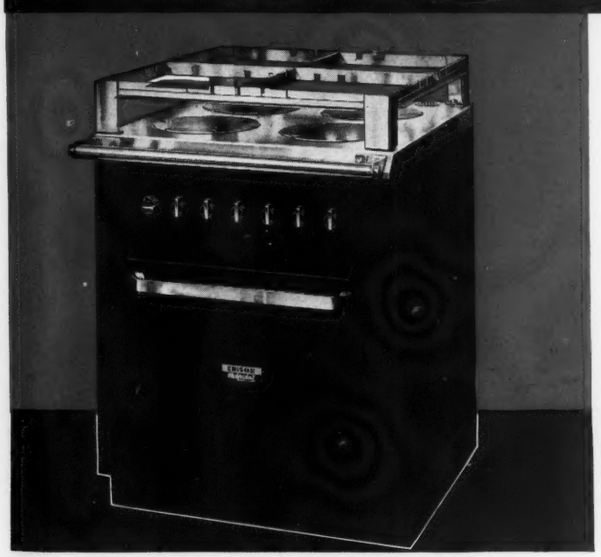

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AFTER 25 YEARS at sea Hotpoint-Edison Electric Galley Equipment enjoys greater recognition than ever. Still serving on ships built during the last war, it is today being installed on most naval and maritime vessels because electric galley equipment offers these important advantages:

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2. Smoke and soot are eliminated. No galley smoke to help the enemy.
3. Compact design. No auxiliary pipes, vents, tanks, valves, gauges or heat spacers to use vital metals and valuable space.
4. Liquid fuels can generate electricity more efficiently than they can cook food. One BTU of electricity vs. nearly ten of oil for cooking. Coal may be saved about ten pounds for one by cooking electrically.
5. Conserves oil, saves storage space.
6. Electric galleys are seaworthy. Rough weather, changes in speed, sudden change of course, do not affect them. No oil to splash.
7. Cleanliness is built into Electric Galley Equipment.
8. Economical to install and operate.

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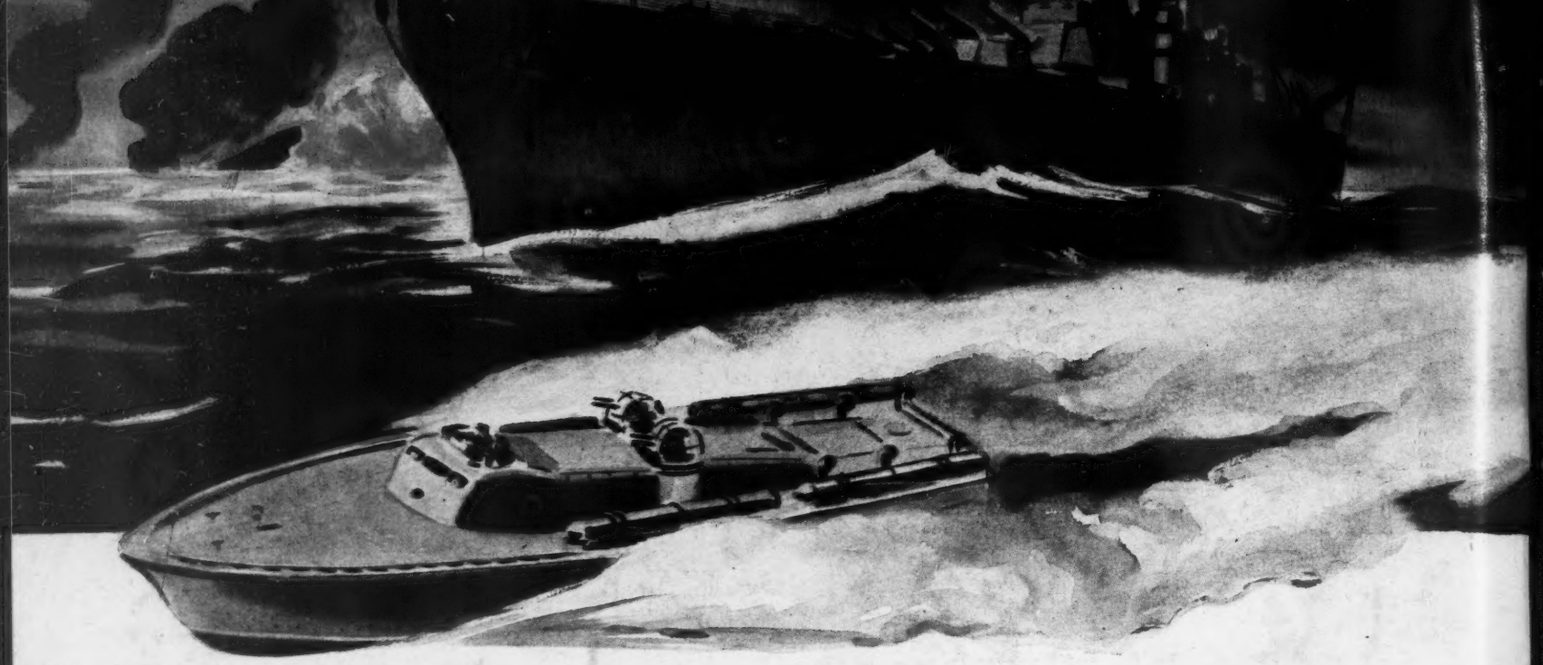

Victory is a matter of Power!

The men on enemy decks know what it means to be terror-stricken. Ask the men on one of the Allies' motor torpedo boats. For nothing puts more fear into the Axis' hearts than the lightning blur that suddenly streaks toward them from nowhere. The destruction the sleek avengers hand out is swift and sure. ★★ Our job is producing STERLING ADMIRALS to give these boats the power they need. The power is delivered with more efficiency than the marine world has ever known before. ★★ It's a big assignment and we're doing it in a big way. The Sterling Admiral is an engine of such exact tolerances that it is paralleled only in the precision of aircraft engines. Craftsmen are working to tolerances that are measured in three and four decimal places. ★★ Yet, we are producing Sterling Admirals by mass production methods on steadily moving assembly lines. ★★ In this Sterling effort, thousands of men from a dozen industries are taking part. And we welcome all the aid we can get... from suppliers, subcontractors and skilled mechanics. ★★ Because Victory is a matter of Power!

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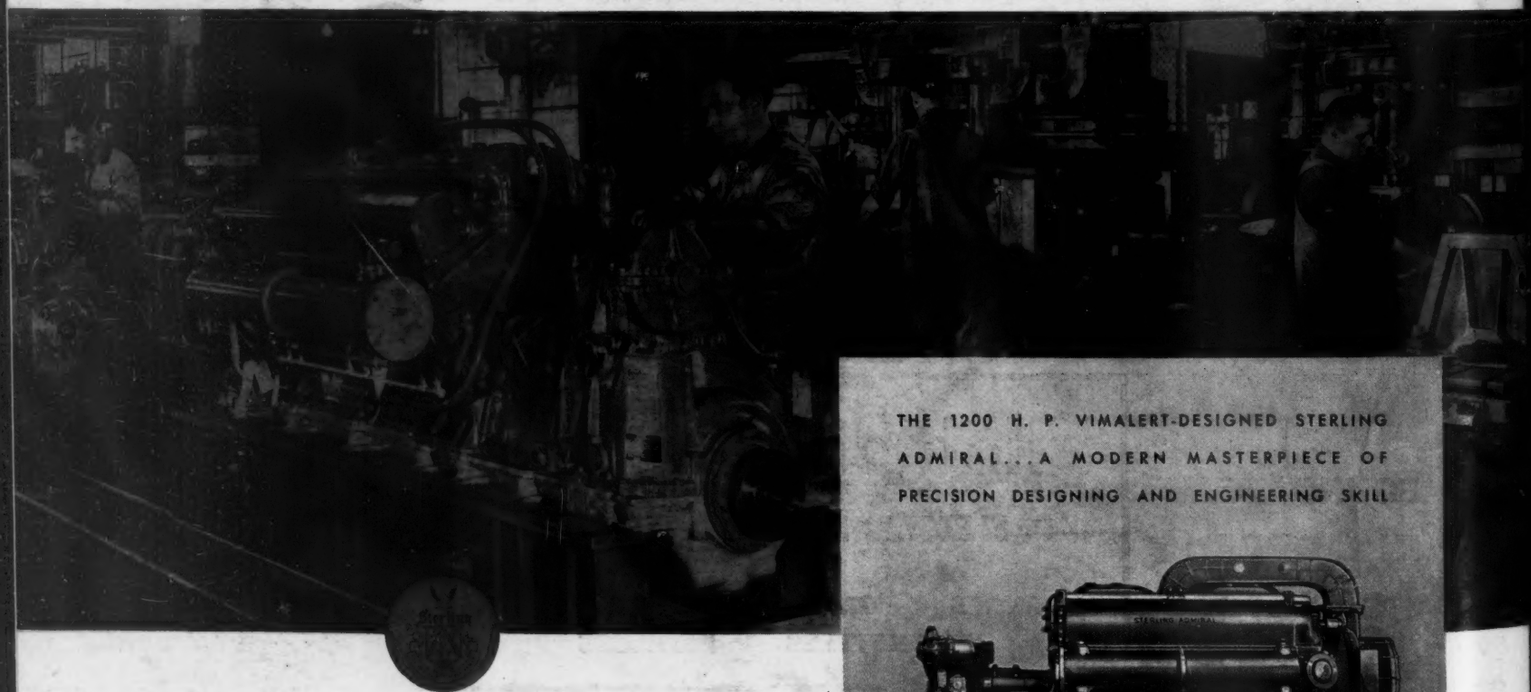

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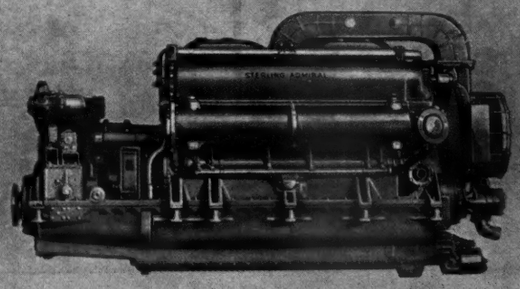

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